



LIST  
OF THE  
SPECIMENS  
OF  
HOMOPTEROUS INSECTS  
IN  
THE COLLECTION  
OF THE  
BRITISH MUSEUM.



PART I.

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## INTRODUCTION.

THE principal object of the present Catalogue has been to give a complete list of the specimens of Homopterous Insects contained in the collection of the British Museum, indicating at the same time the peculiarities of each, as regards variation of character, locality, and the source from whence it has been derived. With this view, the different individuals of each species contained in the collection are indicated by the letters *a*, *b*, *c*, &c., following the name of the species and its synonymes, and the description, if it appeared to have been before undescribed.

This part of the Catalogue of Homopterous Insects has been prepared and the new species described by Mr. FRANCIS WALKER, so well known for his attention to this order of Insects

The remaining part, containing the other families, is in hand, and will follow as soon as it can be completed.

JOHN EDWARD GRAY.

*British Museum,*

*Oct. 15th, 1850.*



# LIST

OF

## HOMOPTEROUS INSECTS.

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### Order I. CICADINA.

*Cicadina*, Burmeister, *Handb. Ent.* ii. 1, 99.

### Fam. I. STRIDULANTIA.

*Stridulantia*, Burm. *Handb. Ent.* ii. 1, 170.

*Note.*—The fore-wing of nearly all the species in this family contains sixteen areolets, which Germar distinguishes by the following names:—one primitive areolet; one front areolet; six discoidal areolets; and eight marginal areolets. The flap is at the base of the hind border of the hind wing, and can be folded beneath. In the fore-wing there is a small corresponding part which I have named the fore-flap, but it does not fold. The first cross-vein forms the base of the second marginal areolet, and the second forms the base of the third; the third forms the base of the fifth, the fourth of the seventh, and the fifth of the eighth. The angles mentioned are outward, and are formed by the base of each cross-vein.

### Genus 1. POLYNEURA.

*Polyneura*, Westwood, *Arc. Ent.* 1842, 92.

## 1. POLYNEURA DUCALIS.

*Polyneura ducalis*, *Westw. Arc. Ent.* 1842, 92, pl. 24, f. 2. *Amyot et Serv. Hist. Nat. Ins. Hém.* 460, 1.

*a.* Nepal. Presented by General Thos. Hardwicke.

*b—d.* ?

## Genus 2. PYCNA.

*Pycna*, *Amyot et Serv. Hist. Nat. Hém.* 463, 361.

## 1. PYCNA STRIX.

*Pycna strix*, *Amyot et Serv. Hist. Nat. Hém.* 463, 1.

*Cicada stryx*, *Brull. Regn. Anim.* pl. 95, f. 1.

*Hab.*——?

## Genus 3. PLATYPLEURA.

*Platycleura*, *Amyot. et Serv. Hist. Nat. Hém.* 465, 364.

## 1. PLATYPLEURA STRIDULA.

*Platycleura stridula*, *Amyot. et Serv. Hist. Nat. Hém.* 466, 1.

*Cicada stridula*, *Linn. Syst. Nat.* i. 2, 706, 12. *Mus. Lud. Utr.* 157, 4. *Oliv. Enc. Méth.* v. 751, 22, pl. 112, f. 2. *Gmel. Ed. Syst. Nat.* i. 3, 2096, 12. *Germ. Thon. Arch.* ii. 2, 19. *Silb. Rev. Ent.* ii. 76, 54. *Burm. Handl. Ent.* ii. 1, 179, 1. *Blanch. Hist. Nat. Ins.* iii. 165, 3.

*C. catenata*, *Drury, Ins.* ii. pl. 27, f. 2.

*C. nigrolinea*, *Deg. Ins.* iii. 219, 15, pl. 33, f. 1.

*Scarabæus volans*, *Seba, Thes.* ii. 23, pl. 2, f. 5.

*Tettigonia Stridula*, *Fabr. Syst. Ent.* 679, 8. *Sp. Ins.* ii. 320, 9. *Mant. Ins.* ii. 266, 13. *Ent. Syst.* iv. 21, 26. *Syst. Rhyn.* 38, 23.

*a—b.* South Africa. Presented by Dr. A. Smith.

*h—m.* Cape. Presented by R. W. Townsend, Esq.

*n.* Cape. Presented by J. G. Children, Esq.

*o.* South Africa. Presented by G. F. Angas, Esq.

*p, q.* Natal. From Dr. Krauss' collection.

*r, s.* Cape. From M. Dregé's collection.

## 2. PLATYPLEURA HIRTIPENNIS.

*Cicada hirtipennis*, *Germ. Silb. Rev. Ent.* 80, 57, f. 25. Perhaps a variety of *P. stridula*.

## 3. PLATYPLEURA CAPENSIS.

*Platypleura capensis*, *Amyot. et Serv. Hist. Nat. Hém.* 466, 2.

*Cicada capensis*, *Linn. Syst. Nat.* i. 2, 706, 13. *Mus. Lud. Utr.* 158,

2. *Sulz. Hist. Ins.* pl. 9, f. 8. *Petiv. Gaz.* vii. pl. 4, f. 1.

*Oliv. Enc. Méth.* v. 751, 23, pl. 112, f. 5. *Stoll, Cic.* 27, pl.

3, f. 15. *Gmel. Ed. Syst. Nat.* i. 3, 2097, 13.

*a, b.* South Africa. Presented by Dr. A. Smith.

*c—e.* Natal. From Dr. Krauss' collection.

*f—h.* Cape. From M. Gueinzus' collection.

*i, j.* South Africa. From Mr. Argent's collection.

## 4. PLATYPLEURA DIVISA.

*Cicada divisa*, *Germ. Silb. Rev. Ent.* 80, 56, f. 25. Perhaps a variety of *P. capensis*.

## 5. PLATYPLEURA OCELLATA.

*Cicada ocellata*, *Deg. Ins.* iii. 220, pl. 33, f. 1. *Oliv. Enc. Méth.* v. 751, 21, pl. 112, f. 3.

*Cicada ciliaris*, *Linn. Syst. Nat.* 706, 8. *Mus. Lud. Utr.* 155.

*Oliv. Enc. Méth.* v. 757, 52. *Runph. Herb.* iii. 210, pl. 135.

*Germ. Thon. Arch.* ii. 2, 18. *Silb. Rev. Ent.* ii. 78, b.

*a—c.* South Africa. Presented by the Earl of Derby.

*d—g.* South Africa. Presented by Dr. A. Smith.

*h* ——— ? Presented by J. G. Children, Esq.

## 6. PLATYPLEURA PLUMOSA.

*Cicada plumosa*, *Germ. Silb. Rev. Ent.* ii. 81, 58, f. 26. Perhaps a variety of *P. ocellata*.

## 7. PLATYPLEURA AFFINIS.

*Tettigonia affinis*, *Fabr. Syst. Rhyn.* 37, 22.

*Cicada affinis*, *Germ. Thon. Arch.* ii. 2, 6. *Silb. Rev. Ent.* ii. 79, d.

## 8. PLATYPLEURA DECORA.

*Cicada decora*, Germ. *Silb. Rev. Ent.* ii. 79, 552, f. 4. Stoll, *Cic.* 39, pl. 7, f. 37.

First cross-vein straight, very slanting, forming a very obtuse angle, parted from the second by thrice its length; second nearly straight, very slanting, forming a very obtuse angle, much longer than the first; third nearly straight, slightly slanting, forming a slightly acute angle; fourth slightly curved, slightly slanting, forming a very slightly acute angle, longer than the third; fifth curved, forming a nearly right angle.

a. Cape? From Mr. Shuckard's collection.

## 9. PLATYPLEURA PHALENOIDES, Mas. et Fem.

*Nervus transversus* 1us subcurvus, valdè obliquus, angulum valdè obtusum fingens; 2us subcurvus aut subundatus, valdè obliquus, angulum valdè obtusum fingens; 3us subundatus aut subcurvus, obliquus, angulum acutum fingens; 4us subcurvus, obliquus, angulum subacutum fingens, 3o plus minusve brevior.

Second marginal areolet full five-sixths of the length of the first: first cross-vein very slightly curved, very slanting, forming a very obtuse angle, parted from the second by more than thrice its length; second, very slightly curved, very slanting, forming a very obtuse angle, nearly twice the length of the first; third very slightly waved, slanting, forming an acute angle; fourth very slightly curved, slanting, forming a slightly acute angle, much shorter than the third; fifth curved abruptly to the hind border, forming a slightly acute angle.

*Var. β.* First cross-vein parted from the second, by nearly four times its length; fourth slightly waved, very little shorter than the third.

*Var. γ.* First cross-vein parted from the second by little more than twice its length; second very little longer than the first.

*Var. δ.* First cross-vein parted from the second by full five times its length; second about thrice the length of the first; fourth hardly shorter than the third.

*Var. ε.* Second cross-vein slightly waved, a little longer than the first.

*Var. ζ.* Third cross-vein straight with the exception of a slight curve in front.

*Var. η.* First cross-vein parted from the second by six times its

length; second very slightly waved, near four times the length of the first.

The preceding varieties may be distinct species.

*Male*.—Body green, more or less tinged with tawny, covered with whitish down, clothed with black hairs above, with whitish hairs beneath; head much narrower than the fore-chest, adorned with a black irregular band which sends forth towards the hind border a black stripe, on each side of which there is a black spot; face very slightly convex, adorned on each side in front with black bands: mouth yellow with a black tip, extending a little beyond the hind lips: feelers black; first joint tawny: eyes not prominent: fore-chest broadest in the middle: scutcheon adorned with five stripes, the middle one much widened behind, the two side pairs oblique: hind scutcheon broad, very slightly furrowed, adorned with a small black spot on the fore-border, slightly widened, and forming a black angle on each side which bends upward: scutcheon of the middle chest adorned with four obconical black stripes; inner pair hardly half the length of the outer pair, succeeded by a dart-shaped mark which sends forth a black band on each side; a black band on each side nearer the tip; hind border very slightly excavated: abdomen hardly longer than the chest, adorned with a white patch on each side near the tip which is tawny; hind borders of the segments more or less tawny: opercula pitchy, close; drums rather large, black with tawny borders, more than one-third of the length of the abdomen, slightly overlapping: legs tawny; thighs adorned with pitchy streaks; knees partly black; claws black, tawny at the base; fore-thighs armed with two very short and blunt black teeth: fore-wings dark brown, covered with white shining down, varied with tawny towards the base, and towards the tip with colourless marks and bands which are variable in size and shape; veins tawny, green towards the base; hind wings deep tawny, dark brown towards the border, which is colourless; veins pale tawny; flaps dark brown.

*Fem*.—Black marks on the head smaller and more distinct than those of the male: feelers tawny; second joint black: drums very small, very far apart: oviduct ferruginous.

Length of the body 9—12 lines; of the wings 31—39 lines.

- a. North Bengal. From Miss Campbell's collection.
- b, c. Silhet. From the Rev. J. Stainforth's collection.
- d, e. North India. From Mr. Warwick's collection.
- f. Assam. From Mr. Warwick's collection.
- g. Java? From Mr. Leadbeater's collection.
- h, i. Silhet. From Mr. Sowerby's collection.
- j, k. ———?



## 10. PLATYPLEURA HILPA, Mas. et Feid.

*Nervus transversus 1us subcurvus, obliquus, angulum valde obtusum fingens, 2o ejus longitudine plus triplò divisus; 2us subcurvus, obliquus, angulum valde obtusum fingens; 1o multò longior; 3us curvus, obliquus, angulum subacutum fingens; 4us subcurvus, obliquus, angulum subacutum fingens, 3o brevior.*

Second marginal areolet a little shorter than the first: first cross-vein very slightly curved, slanting, forming a very obtuse angle, parted from the second by more than thrice its length; second slightly curved, slanting, forming a very obtuse angle, very much longer than the first; third curved, slanting, forming a slightly acute angle; fourth slightly curved, slanting, forming a slightly acute angle, shorter than the third; fifth curved, upright, forming a slightly acute angle: the two cross-veins above it are distinct. Body of the male tawny; of the female dark tawny: head narrower than the fore chest; a broad irregular black band across the crown; face slightly convex, adorned with black bands: mouth black, reaching the hind-hips: eyes not prominent: feelers black: hind-scutcheon of the fore-chest broad, not widened at the base of each fore-wing, rounded and pitchy on each side: scutcheon of the middle-chest adorned with four broad black obconical stripes; the inner pair not more than half the length of the outer pair; between the latter there is a conical stripe, and behind them there are five black spots, two on each side of the middle one, which is angular and joins the conical stripe before mentioned; hind border slightly excavated: breast partly black: abdomen black, obconical, longer than the chest, tawny at the tip beneath: opercula and drums of the male tawny, the former rather large: legs very dark tawny; claws black towards the tips: fore-thighs without teeth: wings of the male paler than those of the female; fore-wings nearly colourless, dark tawny towards the base, adorned with four broad irregular brown bands, and along the hind border with two connected rows of brown spots; hind-wings dull tawny with two brown bands, the inner one broader than the other, but not extending more than half across the wing; flaps tawny. Length of the body 10 lines; of the wings 32 lines.

*a, b.* China. Presented by J. C. Bowring, Esq.

*c.* China.

## 11. PLATYPLEURA SIGNIFERA, Mas.

*Nervus transversus* 1us subcurvus, valdè obliquus, angulum valdè obtusum fingens, 2o ejus longitudine quadruplò divisus; 2us subcurvus, valdè obliquus, angulum valdè obtusum fingens, 1o multò longior; 3us subundatus, valdè obliquus, angulum acutum fingens; 4us subcurvus, obliquus, angulum subacutum fingens, 3o paulò brevior.

Second marginal arcolet full five-sixths of the length of the first: first cross-vein slightly curved, very slanting, forming a very obtuse angle, parted from the second by four times its length; second slightly curved, very slanting, forming a very obtuse angle, very much longer than the first; third slightly waved, very slanting, forming an acute angle; fourth slightly curved, slanting, forming a slightly acute angle, a little shorter than the third; fifth curved, forming a nearly right angle. Body black, powdered with white beneath and on the tip of the abdomen: head much narrower than the fore-chest, adorned on each side with a waved tawny band which has a tawny spot behind it; two small almost connected yellow spots on the face which is very slightly convex: mouth tawny with a black tip reaching nearly to the hind-hips: eyes not prominent: feelers black: fore-chest tawny, broadest in the middle; disk of the scutcheon mostly black; hind-scutcheon broad, widened and almost angular on each side, which bends very slightly upward and has a black border: sides, cross ridge and hind border of the scutcheon of the middle chest tawny; hind border hardly excavated: legs dark tawny, powdered with white; fore-shanks, fore-feet, and tips of the other feet black; fore-thighs armed with two very short and blunt black teeth; hind-shanks beset with tawny spines: fore-wings brown, partly gray, and feathered with brown, adorned with nine irregular colourless spots; hind borders colourless, slightly streaked with brown, and communicating with a parallel row of semicircular colourless spots; veins black, partly tawny; hind-wings tawny, dark brown on one-third of the surface towards the borders, which are whitish with a row of small pale brown marks near the brown part; the latter is adorned with a colourless spot in each wing; veins tawny, partly black. Length of the body 9 lines; of the wings 27 lines.

a. South Africa. Presented by Dr. A. Smith.

## 12. PLATYPLEURA VARIA.

*Cicada varia*, Oliv. *Enc. Méth.* v. 756, 44, pl. 113, f. 6. *Stoll, Cic.* 102, pl. 26, f. 147. *Germ. Silb. Rev. Ent.* ii. 79, f.

a. Cape. From M. Dregé's collection.

b. Natal. From M. Gueinzus' collection.

c. ——— ?

## 13. PLATYPLEURA CHLORONOTA, Fem.

*Nervus transversus* 1us subrectus, valde obliquus, angulum valde obtusum fingens, 2o plus duplò ejus longitudine divisus; 2us subrectus, perobliquus, angulum perobtusum fingens, 1o multò longior; 3us undatus, subobliquus, angulum vix acutum fingens; 4us subrectus, subobliquus, angulum vix acutum fingens, 3o longior.

Second marginal arcelet full five-sixths of the length of the first: first cross-vein nearly straight, very slanting, forming a very obtuse angle, parted from the second by rather more than twice its length; second nearly straight, extremely slanting, forming an extremely obtuse angle, very much longer than the first; third waved, slightly slanting, forming a hardly acute angle; fourth nearly straight, slightly slanting, forming a hardly acute angle, longer than the third; fifth curved, forming a slightly acute angle. Body green: head narrower than the fore-chest, adorned with two waved black bands; face very slightly convex: mouth tawny with a black tip, reaching the hind-lips: eyes not prominent: feelers black: fore-chest broadest in the middle: scutcheon adorned with four black stripes, the middle pair curved towards each other, the side pair oblique; hind-scutcheon slightly widened and forming a very obtuse angle on each side: scutcheon of the middle-chest adorned with four obconical tawny spots which proceed from the fore border, and are more or less bordered and mottled with brown, the middle pair are shorter than the outer pair, and have a spot of the like hue behind them; hind border slightly excavated: abdomen obconical, longer than the chest, black above with the exception of a tawny stripe, which extends from the base to the middle, and is continued along the hind borders of the segments: drums very small, pale tawny, far apart: legs green; fore-thighs armed with three black teeth; hind-shanks beset with tawny spines: fore-wings gray mingled with green, tawny towards the tips; hind-wings pale tawny, with a broad white border which is divided by an irregular brown interval from the tawny part; flaps pale tawny. Length of the body 13 lines; of the wings 40 lines.

a. Port Natal. From M. Gueinzus' collection.

## 14. PLATYPLEURA FULVIGERA, Mas. et Fem.

*Nereus transversus* 1us subrectus, valdè obliquus, angulum valdè obtusum fingens, 2o plus quadruplo ejus longitudine divisus; 2us subrectus, valdè obliquus, angulum valdè obtusum fingens, 1o ferè duplò longior; 3us subcurvus, obliquus, angulum acutum fingens, 3o multò longior.

Second marginal areolet nearly as long as the first: first cross-vein nearly straight, very slanting, forming a very obtuse angle, parted from the second by more than four times its length; second nearly straight, very slanting, forming a very obtuse angle, nearly twice the length of the first; third slightly curved, slanting, forming an acute angle; fourth slightly curved, slanting, forming an acute angle, very much longer than the third; fifth curved, forming an acute angle. Body tawny, with some black marks beneath: head much narrower than the fore-chest, adorned with two irregular tawny bands; face very slightly convex, adorned with black bands on each side in front: mouth tawny, with a black tip, reaching a little beyond the hind-hips: feelers black: eyes not prominent: fore-chest widest in the middle; furrows of the scutcheon black; hind-scutcheon adorned on the fore-border with two black dots, widened, black, and forming a slightly obtuse angle on each side: scutcheon of the middle-chest adorned with four obconical black marks, the outer pair partly tawny towards the base, the inner pair short, and having a dart-shaped mark between them; behind this there is a cross-shaped mark with a black dot, and a black band on each side of it; hind border hardly excavated: abdomen hardly longer than the chest; hind borders of the segments adorned with tawny bands, which are broadest beneath: opercula tawny, large, close; drums tawny, not apart, black at the base, less than half the length of the abdomen: legs tawny; knees and tips of the shanks and of the feet black; fore-thighs armed with black teeth; hind-shanks beset with tawny spines: wings tawny; fore-wings varied with brown, which extends beyond the brown part into the colourless half of the wing; veins tawny, darker towards the tips; hind-wings adorned with a dark brown stripe near the border which is pale brown, and especially so towards the inferior part; a very large brown spot in the fore part of the wing communicates more or less with the brown stripe; flaps tawny, with brown borders. *Fem.*—Drums very small, far apart.

Length of the body 10 lines; of the wings 30 lines.

a, b. Philippine Isles. Presented by J. C. Bowring, Esq.

15. *PLATYPLEURA BASIMACULA*, Mas.

*Nervus transversus* 1us subcurvus, valdè obliquus, angulum valdè obtusum fingens, 2o plus triplò ejus longitudine divisus; 2us subcurvus, valdè obliquus, angulum valdè obtusum fingens, 1o multò longior; 3us curvus, valdè obliquus, angulum valdè acutum fingens; 4us curvus, obliquus, angulum acutum fingens, 3i longitudine.

Second marginal areolet nearly as long as the first: first cross-vein very slightly curved, very slanting, forming a very obtuse angle, parted from the second by more than thrice its length; second slightly curved, very slanting, forming a very obtuse angle, much longer than the first; third slightly curved, very slanting, forming a very acute angle; fourth slightly curved, slanting, forming an acute angle, as long as the third; fifth curved, forming a slightly acute angle. An insect of this species has an additional cross-vein in the second discoidal areolet; and the third and fourth cross-veins are much curved. Body tawny: head narrower than the fore-chest; crown adorned with two very irregular black bands; face very slightly convex: mouth tawny, with a black tip, extending to the hind-lips: eyes not prominent: feelers dark tawny: fore-chest broadest in the middle; scutcheon adorned with a black stripe, which joins a black band at each end; hind-scutcheon rather narrow in the middle, rounded and much widened on each side: scutcheon of the middle-chest adorned with four large black marks; the outer pair obconical, the inner pair smaller and nearly round; a black spot near the tip; hind border slightly excavated: abdomen obconical, a little longer than the chest, black above, with the exception of the hind borders of the segments: opercula pitchy, close: drums pale tawny, slightly overlapping, less than half the length of the abdomen: legs tawny, clothed with pale hairs; claws black, tawny at the base; fore-thighs armed with very short tawny teeth; hind-shanks beset with tawny spines: fore-wings colourless, tawny towards the base, whence a tawny stripe proceeds near the hind border to the tip; two irregular and oblique tawny bands beneath the fore border, these tawny marks are feathered with brown; hind border slightly striped with pale brown; primitive areolet brown; fore-flaps pale tawny; hind-wings tawny, with a colourless border, which is divided by a brown interval from the tawny part; borders of the flaps white. Length of the body 8 lines; of the wings 23 lines.

*a, b.* Congo. Presented by Sir J. Richardson.

## 16. PLATYPLEURA REDUCTA, Fem.

*Nervus transversus* 1us subrectus, valdè obliquus, angulum valdè obtusum fngens, 2o fere sexies ejus longitudine divisus; 2us subrectus, valdè obliquus, angulum valdè obtusum fngens, 1o duplò longior; 3us subundatus, valdè obliquus, angulum acutum fngens; 4us subrectus, obliquus, angulum subacutum fngens, 3o brevior.

Second marginal areolet longer than the first: first cross-vein nearly straight, very slanting, forming a very obtuse angle, parted from the second by nearly six times its length; second nearly straight, very slanting, forming a very obtuse angle, about twice the length of the first; third slightly waved, very slanting, forming an acute angle; fourth nearly straight, slanting, forming a slightly acute angle, shorter than the third; fifth curved, forming a nearly right angle. Body pale tawny, clothed with short whitish hairs: head a little narrower than the fore-chest; an irregular black band across the crown; face marked with black, very slightly convex: mouth tawny, with a black tip, reaching the hind-hips: feelers tawny at the base: eyes not prominent: fore-chest broadest at the base of the fore-wings; hind scutcheon widened, and forming a very obtuse angle on each side; scutcheon of the middle-chest adorned with four black marks, the outer pair large and obconical, the inner pair shorter and nearly round, and having a dart-shaped black mark behind them; hind border hardly excavated: abdomen slightly bronzed, obconical, a little longer than the chest: legs pale tawny; claws and tips of the feet black; fore-thighs armed with three short tawny teeth; hind-shanks beset with tawny spines: fore-wings colourless, pale tawny at the base; some pale brown marks in the disk, and beyond these two brown bands parallel to the hind border; veins pale tawny; hind-wings yellow, with a broad white border, which is divided by a broad brown border from the yellow part; flaps yellow. Length of the body 7 lines; of the wings 20 lines.

a. South Africa. Presented by Dr. A. Smith.

## 17. PLATYPLEURA ALBIGERA, Fem.

*Nervus transversus 1us subrectus, valdè obliquus, angulum valdè obtusum ficiens, 2o plus triplo ejus longitudine divisus, 2us subcurvus, valdè obliquus, angulum valdè obtusum ficiens, 1o ferè duplò longior; 3us et 4us subrecti, subobliqui, angulos subacutos fingentes.*

Second marginal arcolet longer than the first: first cross-vein nearly straight, very slanting, forming a very obtuse angle, parted from the second by more than thrice its length; second very slightly curved, very slanting, forming a very obtuse angle, nearly twice the length of the first; third nearly straight, slightly slanting, forming a very slightly acute angle; fourth nearly straight, very slightly slanting, forming a very slightly acute angle; fifth curved, forming an acute angle. Body green, with a tawny tinge: head a little narrower than the fore-chest: crown adorned with an irregular black band; face slightly convex, adorned on each side in front with brown bands, which are paler towards the mouth; the latter tawny, with a black tip, reaching to the hind-hips: feelers black: eyes not prominent: fore-chest broadest in the middle; furrows of the scutcheon pale brown; hind-scutcheon adorned with two black dots on the fore border, rounded and much widened on each side: scutcheon of the middle-chest adorned with six black marks, the two outer pairs indistinct and oblique, the middle pair distinct, broad and obconical; hind border slightly excavated: abdomen brown, obconical, longer than the chest, tawny beneath and along the hind border of each segment: drums pale tawny, very small, far apart: legs tawny; tips of the claws black; hind-shanks beset with tawny spines: fore-wings whitish, tinged with green towards the base, feathered with pale brown, which forms two rows of double dots along the hind border: veins tawny towards the base, elsewhere feathered with pale brown, adorned with a row of brown ringlets along the hind border; a waved, whitish stripe along the hind border; four large whitish spots on the fore border, and three on the hind border; hind-wings tawny, adorned with two dark brown bands, between which are brown streaks; border pale brown, excepting the outermost part, which is colourless. Length of the body 11 lines; of the wings 26 lines.

a. Cape. From Mr. Shugkard's collection.

## 18. PLATYPLEURA SPHINX, Mas et Fem.

*Nervus transversus 1us subrectus, subobliquus, angulum subobtusum  
 fingens, 2o quinquies ejus longitudine divisus; 2us subrectus,  
 valdè obliquus, angulum valdè obtusum fingens, 1o plus duplò  
 longior; 3us subrectus, valdè obliquus, angulum valdè acu-  
 tum fingens; 4us subcurvus, obliquus, angulum subacutum  
 fingens, 3i dimidio paulò longior.*

Second marginal areolet as long as the first: first cross-vein nearly straight, slightly slanting, forming a very slightly obtuse angle, parted from the second by about five times its length; second nearly straight, very slanting, forming a very obtuse angle, much more than twice the length of the first; third nearly straight, very slanting, forming a very acute angle; fourth slightly curved, slanting, forming a slightly acute angle, a little more than half the length of the third; fifth curved, forming a slightly acute angle. In the left wing of an insect of this species the third cross-vein is not more than half the length of that in the other wing. Body pale tawny, tinged with white, clothed with short whitish hairs: head narrower than the fore-chest; crown adorned with two brown bands; face very slightly convex: mouth tawny, with a brown tip, reaching the hind-hips: eyes not prominent: feelers dark tawny: fore-chest broadest in the middle; hind-scutcheon much widened, and almost angular on each side: scutcheon of the middle-chest adorned with four obconical dark brown marks, the outer pair long, the inner pair short and pointing towards two dots of the same colour: hind border very slightly excavated: abdomen obconical, a little longer than the chest: opercula close; drums of moderate size, nearly meeting, less than half the length of the abdomen: legs pale tawny; tips of the shanks darker; claws pitchy, tawny at the base: fore-thighs armed with tawny teeth, which hardly rise above the surface; hind shanks beset with tawny spines, whose tips are pitchy: fore-wings whitish, brownish-tawny towards the base, and having elsewhere some irregular pale brown marks, which, here and there, include white spots; veins yellow; hind-wings brown, mostly yellowish-white towards the base, and having a large yellowish-white spot in the disk, white at the tips, and adorned with a white spot on the hind border, which elsewhere is brown; flaps yellowish-white, with broad brown borders. Length of the body 8 lines; of the wings 21 lines.

a. North Bengal. From Miss Campbell's collection.

b. North India. From Mr. Warwick's collection.



## 19. PLATYPLEURA PUNCTIGERA, Mas.

*Nervus transversus* 1us subrectus, subobliquus, angulum obtusum fingens, 2o quadruplò ejus longitudine divisus; 2us subrectus, valdè obliquus, angulum valdè obtusum fingens, 1o plus duplò longior; 3us subcurvus, valdè obliquus, angulum acutum fingens; 4us subcurvus, subobliquus, angulum subacutum fingens, 3o paultò brevior.

Second marginal areolet more than five-sixths of the length of the first: first cross-vein nearly straight, slightly slanting, forming an obtuse angle, parted from the second by about four times its length; second nearly straight, very slanting, forming a very obtuse angle, more than twice the length of the first; third very slightly curved, very slanting, forming an acute angle; fourth slightly curved, slightly slanting, forming a slightly acute angle, a little shorter than the third; fifth curved, forming an acute angle. Body grassy-green: head much narrower than the fore-chest; crown adorned with two irregular black bands, and with two black dots near the eyes; face slightly convex, adorned with a circle of black marks; mouth tawny, with a black tip, reaching the hind-hips: eyes not prominent: feelers tawny: second joint black: fore-chest broadest in the middle; scutcheon adorned with four black dots, two in the disk and two on the hind border; hind-scutcheon adorned with a black stripe, widened, and forming a distinct angle on each side: scutcheon of the middle-chest adorned with two short black streaks on the fore border, and with four black dots on the hind part; hind border very slightly excavated: abdomen obconical, longer than the chest; its disk brown and shining for a short distance from the base: drums green, of moderate size, not apart, less than one-third of the length of the abdomen: legs green; tips of the feet and of the claws black; fore-thighs armed with three long, oblique black teeth; hind-shanks beset with black spines: wings colourless, green at the base and along some part of the fore border: disks of the areolets adorned with slight pale brown streaks: cross-veins clouded with darker brown, of which there are two rows of spots along the hind border, and a larger brown mark near the convex fore border towards the base: veins green, tawny towards the tips; hind-wings pale green. Length of the body 10—12 lines: of the wings 28—30 lines.

*α, β.* Natal. From M. Gueinzus' collection.

## 20. PLATYPLEURA SUBFOLIA, Mas.

*Nervus transversus* 1us rectus, valdè obliquus, 2o plus sexties ejus longitudine divisus; 2us rectus, valdè obliquus, angulum sub-obtusum fingens, 1o duplò longior; 3us ferè rectus, valdè obliquus, angulum acutum fingens, 4us ferè rectus, subobliquus, angulum rectum fingens, 3i longitudine.

Second marginal areolet a little longer than the first: first cross-vein straight, very slanting, forming an extremely obtuse angle, parted from the second by more than six times its length: second straight, very slanting, forming an extremely obtuse angle, full twice the length of the first; third nearly straight, very slanting, forming an acute angle; fourth nearly straight, slightly slanting, forming a right angle, as long as the third; fifth very much curved, slightly slanting, forming a very obtuse angle. Body pale green, clothed with white hairs, and having a whitish covering, which is most thick beneath: head adorned with an irregular band of black spots: eyes and cyclets red: feelers black: second joint tawny: fore borders of the abdominal segments black: legs pale green; claws and tips of the feet black: fore-shanks armed beneath with three small black teeth: fore-wings pale gray, very convex on the fore border near the base, tinged with pale green, especially towards the base and along the fore border, clouded with pale brown, which forms imperfect ringlets on the areolets, and a row of double-forked marks near the hind border; hind-wings pale green, with white stripes; veins green; flaps pale green. Length of the body 11 lines; of the wings 31 lines.

a, b. Natal. From Dr. Krauss' collection.

## 21. PLATYPLEURA BASIFOLIA, Mas et Fern.

*Nervus transversus* 1us subcurvus, perobliquus, angulum perobtusum fingens, 2o plus duplò ejus longitudine divisus; 2us subrectus, perobliquus, angulum perobtusum fingens, 1o vix brevior; 3us subundatus, obliquus, angulum acutum fingens; 4us rectus, obliquus, angulum acutum fingens, 3o longior.

Second marginal areolet longer than the first: first cross-vein straight, with the exception of a slight curve at its lower end, extremely slanting, forming an extremely obtuse angle, parted from the second by a little more than twice its length; second nearly straight, extremely slanting, forming an extremely obtuse angle, al-

most as long as the first ; third slightly waved, slanting, forming an acute angle ; fourth straight, slanting, forming an acute angle, longer than the third ; fifth curved, forming an acute angle. Body green, or green and tawny, or nearly all tawny : head much narrower than the fore-chest, adorned with three black bands ; the foremost on the face, short and very convex ; the other two widened and connected on the region of the eyelets ; face slightly convex : mouth tawny, with a black tip, reaching nearly to the hind border of the drums : feelers tawny, black at the base : eyes not prominent : fore-chest broadest near the middle ; two black dots in front of the scutcheon, the black marks on whose sides communicate with the U-shaped black mark in the middle ; hind-scutcheon widened, but hardly angular on each side : scutcheon of the middle-chest adorned with about fourteen black marks, eight of these join the fore border, and four of them are obconical ; hind border very slightly excavated : abdomen obconical, a little longer than the chest ; hind borders of the segments adorned with black bands, some of which are interrupted : opercula greenish, close ; drums rather large, slightly overlapping, less than half the length of the abdomen : legs tawny, tinged with green ; tips of the claws black ; fore-thighs armed with black teeth ; hind-shanks beset with tawny spines, which form circlets at the tips : wings colourless, green towards the base, tawny at the base of the fore border ; the colourless part with several brown marks, which are darker on the borders of the veins than in the disks of the areolets ; veins green, tawny towards the tips ; hind-wings green for more than two-thirds of the length, colourless from thence to the tips ; flaps green. Length of the body 13 lines ; of the wings 39 lines.

*a.* South Africa. Presented by Dr. A. Smith.

*b, c.* South Africa. From Mr. Argent's collection.

## 22. PLATYPLEURA CERVINA, Fem.

*Nervus transversus* 1us subcurvus, obliquus, angulum obtusum fingens, 2o ferè triplò ejus longitudine divisus ; 2us subcurvus, obliquus, angulum valdè obtusum fingens, 1o duplò longior ; 3us subcurvus, obliquus, angulum acutum fingens ; 4us subcurvus, obliquus, angulum acutum fingens, 3o multo brevior.

Second marginal areolet much longer than the first : first cross-vein slightly curved, slanting, forming an obtuse angle, parted from the second by nearly thrice its length ; second slightly curved, slanting, forming a very obtuse angle, about twice the length of the

first; third very slightly curved, slanting, forming an acute angle; fourth slightly curved, slanting, forming an acute angle, much shorter than the third: fifth curved, forming a very slightly acute angle. Body pale buff: head nearly as broad as the fore-chest; face very slightly convex: mouth pale buff with a black tip extending to the hind-hips: eyes not prominent: feelers pitchy, buff at the base: fore-chest of equal breadth from the fore border to the hind border; hind-scutcheon widened, and nearly straight on each side; hind border of the scutcheon of the middle chest very slightly excavated; abdomen obconical, a little longer than the chest: drums very small, far apart: legs pale buff; claws black, tawny towards the base; fore-thighs armed with small teeth; hind-shanks beset with buff spines whose tips are black: wings whitish; veins yellow: fore-wings buff along the fore border; cross-veins clouded with brown; a row of brown dots on the tips of the longitudinal veins of the marginal arcolets. Length of the body 8 lines; of the wings 24 lines.

a. North Bengal. From Miss Campbell's collection.

### 23. PLATYPLEURA STRAMINEA, MAS.

*Nervus transversus* 1us *ferè rectus, subobliquus, angulum obtusum fignens, 2o sexties ejus longitudine divisus; 2us subcurvus, obliquus, angulum perobtusum fignens, 1o ferè triplò longior; 3us ferè rectus, obliquus, angulum subacutum fignens; 4us ferè rectus, obliquus, angulum subacutum fignens, 3è longitudine.*

Second marginal arcolelet a little longer than the first: first cross-vein almost straight, slightly slanting, forming an obtuse angle, parted from the second by six times its length; second very slightly curved, slanting, forming an extremely obtuse angle, nearly thrice the length of the first; third nearly straight, slanting, forming a slightly acute angle; fourth nearly straight, slanting, forming a slightly acute angle, as long as the third; fifth slightly curved, nearly upright, forming a slightly acute angle. Body straw-colour, dull, short, broad, thinly clothed with short white hairs; head a little narrower than the fore-chest: mouth pale tawny, with a black tip, reaching the middle-hips: eyes prominent: feelers tawny, pitchy towards the tips, straw-colour at the base: fore-chest not narrower before than behind; hind-scutcheon broad, its rim extending much beyond the scutcheon, forming a very obtuse angle at the base of the forewing, nearly straight on each side, rounded in front: hind border of the scutcheon of the middle-chest slightly excavated: abdomen ob-

conical, a little longer than the chest : opercula of moderate size, close, straw-colour ; drums rather large, nearly meeting, a little less than half the length of the abdomen : legs straw-colour ; tips of the claws black : tips of the hind-shanks beset with a circlet of black spines ; fore-thighs not much thickened, their teeth small : wings colourless (white in the specimen described, which is probably immature) ; fore border and veins pale straw-colour ; second, third, fourth, and fifth cross-veins, and the tips of the longitudinal veins of the marginal areolets, clouded with brown. Length of the body 8 lines ; of the wings 22 lines.

a. North India. From Mr. Stevens' collection.

#### 24. PLATYPLEURA BASI-VIRIDIS, Mas.

*Nervus transversus* 1us subcurvus, obliquus, angulum valdè obtusum fingens, 2o quadruplo ejus longitudine divisus ; 2us ferè rectus, valdè obliquus, angulum perobtusum fingens, 1o ferè duplò longior ; 3us ferè rectus, valdè obliquus, angulum valdè acutum fingens ; 4us subcurvus, obliquus, angulum acutum fingens.

Second marginal areolet a little longer than the first : first cross-vein very slightly curved, slanting, forming a very obtuse angle, parted from the second by full four times its length ; second nearly straight, very slanting, forming an extremely obtuse angle, nearly twice the length of the first ; third nearly straight, very slanting, forming a very acute angle ; fourth straight, with the exception of a slight curve at its upper end, slanting, forming an acute angle, nearly as long as the third ; fifth curved, forming a slightly acute angle. Body tawny : head a little narrower than the fore-chest, adorned with two irregular black bands ; face very slightly convex, adorned on each side in front with brown bands : mouth tawny, with a black tip, extending just beyond the hind-hips : fore-chest broadest near the fore border ; scutcheon adorned with five black marks, the middle one obconical, the other four oblique ; hind-scutcheon adorned with a black mark on the fore border, much widened, tinged with brown, and almost angular on each side : scutcheon of the middle-chest adorned with four very large obconical black marks which proceed from the fore border ; in the angle formed by the inner pair there is a dart-shaped black mark with a black dot on each side, and a black band is behind each of these dots ; hind border very slightly excavated ; abdomen black above ; hind borders of the segments tawny : opercula yellowish, large, close ; drums yellow, large, hardly apart, less than half the length of the abdomen : legs tawny, clothed with pale hairs ; tips of the claws black ; fore-thighs armed with

very short yellow teeth ; hind-shanks beset with tawny spines : forewings colourless, greenish towards the base, adorned with some brown marks which have a tendency to form four very irregular and interrupted bands ; veins green, tawny towards the tips ; hind-wings greenish, with a broad brown border, on which there are two white spots. Length of the body 8 lines ; of the wings 23 lines.

*a.* ——— ?

## 25. PLATYPLEURA BREVIS, Fem.

*Nervus transversus* 1us *vix* *curvus*, *valdè obliquus*, *angulum perobtusum* *figens*, 2o *plus triplò ejus longitudine divisus* ; 2us *subcurvus*, *obliquus*, *angulum valdè obtusum* *figens*, 1o *multò longior* ; 3us *curvus*, *obliquus*, *angulum subacutum* *figens* ; 4us *curvus*, *obliquus*, *angulum subacutum* *figens*, 3i *longitudine*.

Second marginal areolet about four-fifths of the length of the first : first cross-vein hardly curved, very slanting, forming an extremely obtuse angle, parted from the second by more than thrice its length ; second slightly curved, slanting, forming a very obtuse angle, much longer than the first : third curved, slanting, forming a slightly acute angle ; fourth slightly curved, slanting, forming a slightly acute angle, as long as the third ; fifth curved, nearly upright, forming a slightly obtuse angle. In the left wing of the insect described there is an additional cross-vein near the base of the fourth marginal areolet. Body greenish tawny, paler beneath, short, broad : head short and broad, but much narrower than the fore-chest, adorned with two black bands, which are irregular and partly united and include some tawny spots, one of them is in front of the crown, the other across the face : the latter is very slightly convex, and not at all prominent : mouth pale tawny, with a black tip, reaching the hind border of the drums : eyes not prominent : feelers tawny, yellow towards the tips ; first and second joints black : scutcheon of the fore-chest adorned with two irregular black stripes, which in front are united in a triangle, and terminate in two black dots, and are widened into angles along their outer side ; three or four small pitchy or black marks on each side ; hind-scutcheon very broad, with a pitchy outer border near the base of each forewing, and forming with its wide rim an obtuse angle on each side : scutcheon of the middle-chest adorned with four ferruginous stripes, whose borders are black ; the inner pair are much shorter than the outer pair, whose black borders are much interrupted and reduced to three spots, one on each side of the base, and one at the tip ; be-

tween the inner pair there is a black stripe which is widened in the middle, and assumes a diamond form, and has a black spot on each side; hind border very slightly excavated: abdomen obconical, not longer but a little narrower than the chest, black towards the base beneath: opercula pale tawny, close, rather small; drums rather large, pale tawny, slightly overlapping, one-third of the length of the abdomen: legs pale tawny; thighs tinged with green, slightly streaked with brown; claws black, tawny at the base; fore-thighs armed with a very short tooth which hardly rises above the surface; tips of the hind-thighs and of the four hinder shanks pitchy; hind-shanks armed with pitchy spines; fore-feet black; middle-feet black at the base and at the tips: wings colourless; fore-wings indistinctly tinged with brown along the hind border, which is adorned with a double row of pale brown spots; first, second, and third cross-veins clouded with brown; fore border beset with very short spines, green as far as the pitchy band, tawny from thence to the tips; veins ferruginous, black towards the tips. The specimen described has near the base of the third marginal areolet of the left wing an additional cross-vein which is tinged with brown. Length of the body 10 lines; of the wings 42 lines.

*a.* Port Natal. From M. Guérin's collection.

## 26. PLATYPLEURA? SEMICLARA.

*Cicada semiclara*, Germ. *Silb. Rev. Ent.* ii. 82, 59.

## 27. PLATYPLEURA SEMILUCIDA, Mas.

*Nervus transversus 1us rectus, erectus, angulum rectum fingens, 2o octies ejus longitudine divicus; 2us ferè rectus, valdè obliquus, angulum valdè obtusum fingens, 1o triplò longior; 3us subundatus, valdè obliquus, angulum valdè acutum fingens; 4us ferè rectus, obliquus, angulum subacutum fingens, 3i dimidio brevior.*

Second marginal areolet very nearly as long as the first: first cross-vein straight, upright, forming a right angle, parted from the second by full eight times its length; second nearly straight, very oblique, forming a very obtuse angle, about thrice the length of the first; third slightly waved, very oblique, forming a very acute angle; fourth nearly straight, oblique, forming a slightly acute angle, not half the length of the third; fifth curved abruptly to the hind border, forming a hardly acute angle. In this species and in *P. gemina*

the longitudinal vein towards the base of the fore side of the eighth marginal areolet does not, as in other species, form an angle with the fourth cross-vein but a continuous line. Body tawny: head much narrower than the fore-chest; crown adorned with a black spot, on each side of which there are two black dots; face very slightly convex: mouth tawny, with a black tip, extending a little beyond the hind borders of the drums: eyes not prominent: feelers black, tawny at the base: fore-chest broadest near the fore border: scutcheon adorned with some oblique black marks on each side, and in the middle with a slender black stripe which joins a black mark on the fore border of the hind-scutcheon; the latter is widened and black, and forms an obtuse angle on each side: scutcheon of the middle-chest adorned with four large black marks, the side pair obconical, the middle pair short, nearly round; hind border very slightly excavated; abdomen obconical, not longer than the chest, black at the base and on the fore borders of the segments: opercula close, rather large: drums tawny, very large, slightly overlapping, less than half the length of the abdomen: legs tawny, clothed with paler hairs; feet partly pitchy; claws black; fore-thighs armed with very short black teeth; hind-shanks beset with tawny spines: wings brown, with a few colourless marks for half the length from the base, colourless, with some brown marks from thence to the tips; fore border towards the base and veins reddish-tawny; hind-wings dark brown, with a colourless broad border, tawny at the base; flaps pale brown, with colourless borders. Length of the body 8 lines; of the wings 26 lines.

*a, b.* Java. From Mr. Argent's collection.

## 28. PLATYPLEURA GEMINA, Mas.

*Nervus transversus* 1us rectus, *ferè erectus, angulum subobtusum* *figens, 2o plus decies ejus longitudine divisus; 2us subundatus, valdè obliquus, angulum perobtusum figens, 1o plus octies longior; 3us subundatus, valdè obliquus, angulum acutum figens, 3i dimidio vix longior.*

Second marginal areolet a little shorter than the first: first cross-vein straight, almost upright, forming a very slightly obtuse angle, parted from the second by more than ten times its length; second very slightly waved, very slanting, forming an extremely obtuse angle, more than eight times the length of the first; third slightly waved, very slanting, forming a very acute angle; fourth very slightly waved, very slanting, forming an acute angle, hardly more than half the length of the third; fifth curved, upright, form-



ing a hardly acute angle. Body green, short, broad, tinged with tawny: head very much narrower than the fore-chest, mostly pale ferruginous, adorned with seven small black spots, one behind the eyelets, two on each side, and one between two yellow spots at the base of each feeler; face very slightly convex, adorned with a black band: mouth yellow, tinged with green towards the base, black at the tip, extending a little beyond the drums: eyes not prominent: feelers black: scutcheon of the fore-chest adorned with five black marks, one on the hind border, two on each side on the furrows, and one on each side border; hind-scutcheon broad, widened on each side, where it forms a slightly obtuse angle, whose sides are pitchy and rounded: disk of the scutcheon of the middle-chest tawny, adorned with four black marks; two black dots between the tips of the outer pair, which are obconical, and much more than twice the length of the inner pair; hind border very slightly excavated: abdomen obconical, not longer than the chest; its base and the fore borders of the segments black: opercula large, green; drums green, of moderate size, overlapping: legs tawny, partly green, tinged with pitchy-colour; tips of the claws black; fore-feet pitchy; fore-thighs unarmed: fore-wings colourless, brown, and adorned with white and green towards the base, adorned with some brown marks towards the tips; these marks form two very interrupted bands which are parallel to the hind border, the latter is adorned with a row of clusters of three dark brown dots; hind-wings very dark brown, paler at the base, white at the tips and along the hind border; flaps pale brown, with white tips; veins green. Length of the body 9 lines; of the wings 30 lines.

a. Cape.

## 29. PLATYPLEURA SIMPLEX, Fcm.

*Nerrus transversus* 1us subcurvus, obliquus, angulum valdè obtusum fingens, 20 plus triplè ejus longitudine dirisus; 2us subcurvus, valdè obliquus, angulum perobtusum fingens, 10 longior; 3us undatus, obliquus, angulum subacutum fingens; 4us curvus, fere erectus, angulum rectum fingens, 30 brevior.

Second marginal areolet a little shorter than the first: first cross-vein very slightly curved, slanting, forming a very obtuse angle, parted from the second by more than thrice its length; second very slightly curved, very slanting, forming an extremely obtuse angle, longer than the first; third waved, slanting, forming a slightly acute angle; fourth curved, nearly upright, forming a right angle, shorter than the third; fifth curved, slightly slanting, form-

ing a hardly acute angle. Body tawny, tinged with green, short, broad: head much narrower than the fore-chest, adorned above with two black bands which are joined together on each side and include several tawny spots: eyes not prominent: mouth tawny with a black tip, reaching a little beyond the hind-hips: feelers tawny, black towards the base: scutcheon of the fore-chest adorned in front with a short black band, in the middle with two black curved stripes, and on the hind border with two black dots; hind-scutcheon broad, rounded and slightly widened on each side: middle-chest adorned with two black U-shaped marks, with a black stripe, with two black spots, and on each side with a broad, slanting, ferruginous stripe, which has two black spots at its base; hind border very slightly excavated: abdomen not longer than the chest, abruptly tapering towards the tip: legs tawny, tips of the feet and of the claws black; teeth of the fore-shanks very small; wings colourless; veins tawny, black towards the tips; cross-veins indistinctly clouded with brown; primitive arcole, fore-flaps and base of hind-flaps pale fawn-colour. Length of the body 9 lines; of the wings 32 lines.

*a.* Congo. Presented by Sir J. Richardson.

#### Genus 4. OXYPLEURA.

*Oxypleura*, *Amyot et Sere. Hist. Nat. Hém.* 469, 368.

##### 1. OXYPLEURA CLARA?

*Oxypleura clara?* *Amyot et Sere. Hist. Nat. Hém.* 469, 1.

*a.* Gambia. Presented by T. Whitfield, Esq.

##### 2. OXYPLEURA LIMBATA.

*Tettigonia limbata*, *Fabr. Syst. Ent.* 678, 3. *Sp. Ins.* ii. 319, 3. *Mant. Ins.* ii. 265, 4. *Ent. Syst.* iv. 17, 4. *Syst. Rhyn.* 34, 5.

*Cicada limbata*, *Oliv. Enc. Méth.* v. 747, 4, pl. 110, f. 1. *Stoll, Cic.* 51, pl. 12, f. 57. *Gmel. Ed. Syst. Nat.* i. 3, 2099, 88.

*a, b.* Ashanti. From the Wesleyan Missionary Society's collection.  
*c.* Cape Coast.

##### 3. OXYPLEURA CAPITATA.

*Cicada capitata*, *Oliv. Enc. Méth.* v. 754, 34, pl. 112, f. 10. *Stoll, Cic.* 76, pl. 19, f. 103.

*Cicada nobilis*, *Germ. Thon. Arch.* ii. 2, 9. *Silb. Rev. Ent.* ii. 82, 60.

## 4. OXYPLEURA ARMATA.

*Cicada armata*, *Oliv. Enc. Méth.* v. 748, 7, pl. 110, f. 3. *Stoll, Cic* 69, pl. 17, f. 94.

## 5. OXYPLEURA? MARMORATA.

*Tettigonia marmorata*, *Fabr. Syst. Rhyn.* 38, 24.

*Cicada marmorata*, *Germ. Thon. Arch.* ii. 2, 17. *Silb. Rev. Ent.* ii. 79, e.

This species and *O. sanguiflua* may be identical.

## 6. OXYPLEURA SANGUIFLUA, MSS.? Mas et Fem.

*Nervus transversus* 1us subcurvus, valde obliquus, angulum perobtusum fingens, 2o triplo ejus longitudine divisus; 2us curvus, obliquus, angulum obtusum fingens, 1o multo longior; 3us subundatus, valde obliquus, angulum acutum fingens; 4us subcurvus, obliquus, angulum subacutum fingens, 3o multo brevior.

Second marginal areolet a little longer than the first: first cross-vein slightly curved, very slanting, forming an extremely obtuse angle, parted from the second by thrice its length; second curved, slanting, forming an obtuse angle, much longer than the first; third slightly waved, very slanting, forming an acute angle; fourth slightly curved, slanting, forming a slightly acute angle, much shorter than the third; fifth curved, almost upright, forming a hardly acute angle. Body tawny, rather short and broad: head much narrower than the fore-chest, adorned in front with two broad black bands of which the fore one includes a tawny spot; face very slightly convex: mouth reaching far beyond the hind-hips: eyes not prominent: feelers black: scutcheon of the fore-chest ferruginous, with two black dots on the hind border; hind-scutcheon broad, much widened, and forming a nearly right angle on each side: disk of the middle-chest black, adorned with two U-shaped marks; hind border excavated: abdomen obconical, sometimes pitchy above, not longer than the chest; tymbals and drums large: legs tawny; tips of the claws black; fore-thighs hardly armed: forewings colourless, tawny along the fore border, adorned towards the base with three irregular brown bands; cross-veins clouded with brown; flaps red: hind-wings brown, red at the base and along the veins into the disk, colourless at the tips, between which and the

brown part there is a tinge of white; veins tawny, brown towards the tips. Length of the body 10—12 lines; of the wings 31—37 lines.

*a.* India. Presented by J. G. Children, Esq.

*b, c.* N. Bengal. From Miss Campbell's collection.

*d.* N. India. From Mr. Warwick's collection.

*e, g.* India.

## OXYPI

## HEA, Fem

*Nervus transversus* *Aus ferè rectus, valdè obliquus, angulum perobtusum fingens, 20 ferè tripla ejus longitudine divisus*; *2us ferè rectus, obliquus, angulum perobtusum fingens, 10 ferè duplo longior*; *3us rectus, obliquus, angulum acutum fingens*; *Aus subcureus, obliquus, angulum acutum fingens, 30 multò brevior.*

Second marginal areolet full as long as the first: first cross-vein nearly straight, very slanting, forming an extremely obtuse angle, parted from the second by nearly thrice its length; second nearly straight, slanting, forming an extremely obtuse angle, almost twice the length of the first: third straight, slanting, forming an acute angle: fourth straight with the exception of a slight curve near its fore-end, slanting, forming an acute angle, much shorter than the third; fifth curved, forming a slightly acute angle. Body tawny: head and fore-chest very broad: head a little narrower than the fore-chest, adorned with two black stripes, the fore one forming a circle on the face which is slightly convex, and is adorned in front with a row of black bands on each side; mouth tawny with a black tip reaching the hind hips: eyes not prominent: feelers black: fore-chest broadest in the middle; scutcheon adorned with two black marks on each side; hind-scutcheon pale tawny, widened, pitchy, and forming a very obtuse angle on each side: scutcheon of the middle chest adorned with four black marks, the side pair large and obconical, the inner pair smaller and nearly round; a black dot behind each of the latter: hind border very slightly excavated: abdomen punctured, obconical, narrower and a little longer than the chest, hind borders of the segments and tip mostly black: legs tawny, clothed with pale hairs; claws pale tawny with black tips: fore-wings colourless; one-third of the length from the base brown with a broad white band; the colourless part includes a brown band, its cross-veins are clouded with brown, and there are two imperfect rows of brown dots on the tips of the longitudinal veins of the marginal areolets; hind-wings brown, tawny at the base, adorned with a broad interrupted white

band, and at the tip with a white spot; veins dark tawny; flaps brown. Length of the body 13 lines; of the wings 36 lines.

*a.*———?

#### 8. OXYPLEURA BASIALBA, Mas.

*Nervus transversus* 1us *ferè rectus, valdè obliquus, angulum per-obtusum fingens*; 2o *quingies ejus longitudine divisus*; 3us *subcurvus, valdè obliquus, angulum perobtusum fingens*, 1o *plus duplò longior*; 4us *subcurvus, obliquus, angulum acutum fingens*; 5us *curvus, erectus, angulum subacutum fingens*.

Second marginal arcolet as long as the first: first cross-vein nearly straight, very slanting, forming an extremely obtuse angle, parted from the second by full five times its length; second very slightly curved, very slanting, forming an extremely obtuse angle, a little more than twice the length of the first; third very slightly curved, slanting, forming an acute angle; fourth curved, upright, forming a slightly acute angle. Body yellow, clothed with white hairs, covered beneath with white powder: forehead adorned with a black band in front and behind, and with a stripe of short black bands on each side; cheeks also with slender black bands: eyes tawny: eyelets red: feelers tawny with black bands and tips: fore-chest adorned with seven small black marks: middle-chest adorned with three black stripes, the side pair oblique, the middle one straight, widened on each side by the fore border, and having a small black spot on each side near the hind border: abdomen black; drums, tip and hind borders of the segments yellow: legs yellow, clothed with short white hairs; tips of the claws black; hind-shanks beset with tawny spines; fore-thighs armed beneath with two small teeth: wings colourless, white at the base above, brown at the base beneath: from this brown hue a short tawny stripe proceeds along the hind border, and communicates with an oblique brown band which crosses the wing near its base; hind-wings colourless, dark brown with a whitish outline for near half the surface from the base which is tawny; flaps dark brown; veins tawny, pitchy at the tips of the fore-wings. Length of the body 9 lines; of the wings 29 lines.

*a.* North Bengal. From Miss Campbell's collection.

## 9. OXYPLEURA BUFO, Mas.

*Nervus transversus* 1us subcurvus, obliquus, angulum valdè obtusum fingens, 2o plus quadruplo ejus longitudine divisus; 2us subcurvus, valdè obliquus, angulum valdè obtusum fingens, 1o ferè duplò longior; 3us ferè rectus, valdè obliquus, angulum subacutum fingens; 4us ferè rectus, obliquus, angulum subacutum fingens, 3o paullo brevior.

Second marginal arcelet nearly as long as the first: first cross-vein very slightly curved, slanting, forming a very obtuse angle, parted from the second by more than four times its length; second slightly curved, very slanting, forming a very obtuse angle, nearly twice the length of the first; third nearly straight, very slanting, forming a slightly acute angle; fourth nearly straight, slanting, forming a very slightly acute angle, a little shorter than the third: fifth curved, forming a slightly acute angle. Body tawny: head and chest very broad: head much narrower than the fore-chest, adorned with two black irregular bands, the hinder one passing over the region of the eyelets; face very slightly convex: mouth tawny, with a black tip, reaching the hind border of the drums; eyes not prominent; feelers black: fore-chest broadest in the middle; scutcheon adorned with a blackish mark in the middle; furrows blackish; hind-scutcheon pale tawny, ferruginous, much widened, and forming a very projecting right angle on each side: scutcheon of the middle-chest ferruginous; hind border very slightly excavated: abdomen ferruginous, shorter and narrower than the chest, tawny at the tip and beneath: opercula tawny, partly pitchy, close; drums tawny, rather large, nearly meeting, less than half the length of the abdomen, their disks darker: legs tawny; tips of the claws black; fore-thighs armed with two extremely short and blunt tawny teeth: wings with an extremely slight tawny tinge, tawny towards the base, bright tawny along the fore border; veins tawny, darker towards the tips; cross-veins darker. Length of the body 12 lines; of the wings 39 lines.

a. East India. Presented by Sir R. H. Inglis.

10. *OXYPLEURA* PASSA, Mas.

*Nervus transversus*, 1us subcurvus, valdè obliquus, angulum valdè obtusum fingens, 2o quadruplò ejus longitudine divisus; 2us subcurvus, obliquus, angulum valdè obtusum fingens, 1o paullo longior; 3us subcurvus, obliquus, angulum subacutum fingens; 4us subcurvus, rix obliquus, angulum rectum fingens, 3o paullo longior.

\* Second marginal areolet nearly as long as the first: first cross-vein very slightly curved, very slanting, forming a very obtuse angle, parted from the second by four times its length; second very slightly curved, slanting, forming a very obtuse angle, a little longer than the first; third very slightly curved, slanting, forming a slightly acute angle; fourth very slightly curved, hardly slanting, forming a right angle, a little longer than the third; fifth curved, forming a slightly acute angle. Body tawny: head much narrower than the fore-chest, adorned with two irregular black bands, the hinder one widened over the eyelet-region, which has a black dot on each side; face slightly convex: mouth tawny, with a black tip, reaching some distance beyond the hind-hips; eyes not prominent: feelers black: fore-chest broadest in the middle; scutcheon adorned with a club-shaped black mark; furrows blackish; hind-scutcheon, with a black streak above the base of each fore-wing, much widened, and forming a very projecting right angle on each side: scutcheon of the middle-chest adorned with four pitchy obconical marks; the inner pair distinctly angular, darker than the outer pair, and rather more than half their length, and pointing towards two black dots; hind border very slightly excavated: abdomen obconical, a little longer than the chest: opercula large, close; drums meeting beneath, of moderate size, less than half the length of the abdomen: legs tawny; feet and tips of the shanks pitchy; claws black; fore-thighs armed with three very short and blunt tawny teeth; hind-shanks beset with tawny black-tipped teeth: wings tinged with pale tawny; a black spot on the primitive areolet; veins tawny: cross-veins mostly black. Length of the body 11 lines; of the wings 36 lines.

a. Congo. Presented by Sir J. Richardson.

## 11. OXYPLEURA POLITA, Fem.

*Nervus transversus 1us ferè rectus, obliquus, angulum valdè obtusum fingens, 2o plus sexties ejus longitudine divisus; 2us subcurvus, valdè obliquus, angulum valdè obtusum fingens, 1o duplò longior; 3us subunulatus, obliquus, angulum subacutum fingens; 4us curvus, obliquus, angulum acutum fingens, 1o brevior.*

Second marginal areolet a little longer than the first: first cross-vein nearly straight, slanting, forming a very obtuse angle, parted from the second by more than six times its length; second very slightly curved, very slanting, forming a very obtuse angle, about twice the length of the first; third slightly waved, slanting, forming a slightly acute angle; fourth curved, slanting, forming an acute angle, shorter than the third; fifth abruptly curved, forming a slightly acute angle. Body tawny, shining, clothed with whitish hairs, which are mostly beneath, and on the abdomen: head much narrower than the fore-chest, adorned with two black bands; the fore one forming two curved lines on the face, the hinder one widened over the region of the eyelets, on each side of which there is a black dot; face very slightly convex: mouth tawny, with a black tip, reaching far beyond the hind-hips: eyes not prominent: feelers black: fore-chest broadest in the middle; scutcheon adorned with a short black stripe, and with a transverse black mark; furrows blackish; hind-scutcheon widened on each side, and forming a black, obtuse, and projecting angle, whose sides are slightly convex: scutcheon of the middle-chest adorned with four black obconical stripes; the outer pair twice the length of the inner pair, and each including an indistinct tawny spot at the base; in the middle there is a club-shaped black mark, with a black dot on each side; hind-border very slightly excavated: abdomen black, obconical, not longer than the chest; a tawny band on the hind border of each segment: drums tawny, black at the base, far apart, rather small: legs tawny; feet and fore-shanks mostly pitchy; tips of the claws black; fore-thighs armed with very short and blunt blackish teeth: wings colourless, tawny at the base and along the fore border; cross-veins clouded with dark brown; a few pale brown spots on the longitudinal veins, and two rows of brown spots on the veins of the marginal areolets; veins tawny; a black dot on the primitive areolet, which is pale tawny; veins of the hind-wings pale yellow, some of them black; tips of the marginal areolets clouded with brown; base of the wings and of the flaps tawny, of which hue there are some slight streaks extending along the veins. Length of the body 12 lines; of the wings 39 lines.

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## 12. OXYPLEURA BASISTIGMA, Fcm.

*Nervus transversus* 1us ferè rectus, subobliquus, angulum obtusum fingens, 2o plus quadruplo ejus longitudine divisus; 2us ferè rectus, obliquus, angulum valde obtusum fingens, 1o duplo longior; 3us subundatus, obliquus, angulum subacutum fingens; 4us ferè rectus, obliquus, angulum subacutum fingens, 3o longior.

Second marginal areolet shorter than the first: first cross-vein nearly straight, slightly slanting, forming an obtuse angle, parted from the second by more than four times its length; second nearly straight, slanting, forming a very obtuse angle, about twice the length of the first; third slightly waved, slanting, forming a slightly acute angle; fourth nearly straight, slanting, forming a slightly acute angle, longer than the third; fifth curved, forming a very slightly acute angle. Body pale tawny, clothed with paler hairs: head much narrower than the fore-chest, adorned with two black bands, which include tawny spots, the hinder one is widened over the region of the eyelets; face very slightly convex: mouth pale tawny, with a black tip, extending beyond the hind-hips: eyes not prominent: feelers black: fore-chest broadest in the middle; scutcheon adorned with a black cross, and on each side with three oblique black stripes; hind-scutcheon very much widened, and forming a nearly right and very projecting angle on each side: scutcheon of the middle-chest adorned with the four usual marks; the side pair large, obconical, brown with black tips; the middle pair smaller and black, and each succeeded by a black dot; hind border very slightly excavated: abdomen obconical, a little longer and narrower than the chest: a large black spot on each side of the tip: drums pale tawny, very small, far apart: legs pale tawny; tips of the feet, fore-shanks and fore-feet pitchy; claws black; fore-thighs armed with three very short and blunt black teeth; hind-shanks armed with black spines, which form a circlet at the tips: wings colourless; a black spot on the primitive areolet, which is pale tawny; veins pale tawny, partly black, which colour mostly prevails on the cross-veins; flaps pale tawny. Length of the body 12 lines; of the wings 37 lines.

a. Gambia. Presented by T. Whitfield, Esq.

## 13. OXYPLEURA CONTRACTA, Mas.

*Nervus transversus* 1us *ferè rectus, valdè obliquus, angulum valdè obtusum fingens, 2o plus sexties ejus longitudine divisus*; 2us *subcurvus, obliquus, angulum obtusum fingens, 1o duplò longior*; 3us *subcurvus, obliquus, angulum acutum fingens*; 4us *subcurvus, subobliquus, angulum subacutum fingens, 3o paulò brevior.*

Second marginal areolet as long as the first: first cross-vein almost straight, very slanting, forming a very obtuse angle, parted from the second by more than six times its length; second very slightly curved, slanting, forming an obtuse angle, full twice the length of the first; third slightly curved, slanting, forming an acute angle; fourth very slightly curved, slightly slanting, forming a very slightly acute angle, a little shorter than the third; fifth curved, slightly slanting, forming a hardly acute angle. Body tawny, shining, very short and broad, almost hairless: head much narrower than the fore-chest; very short; region of the eyelets and borders of the eyes black; two black bands across the crown; face convex, not prominent, adorned with a black band above, and with a black stripe in front: mouth tawny, with a pitchy tip, reaching the hind-hips: eyes rather large: feelers pitchy, with tawny tips, black towards the base: scutcheon of the fore-chest short, adorned with three black spots in a row, one triangular near the fore border, the second slender in the middle, the third transverse on the hind border; furrows blackish; hind-scutcheon broad, very slightly excavated in the middle of the hind border, forming a broad rim to the scutcheon on each side, where it has a prominent and and slightly obtuse angle: scutcheon of the middle-chest dark yellowish brown, adorned with four black stripes, the middle pair short and obconical, the outer pair oblique and much longer; two black spots near the hind border; sides, cross-ridge and hind border tawny, the latter very slightly excavated: abdomen obconical, hardly longer than the chest; a pitchy band on each segment; tip pitchy: opercula none; drums pale tawny, very small, the space between them equal to twice the breadth of each: legs tawny; feet and fore-shanks pitchy; claws tawny, with black tips; fore-thighs armed with one black tooth of moderate size: wings long and narrow, indistinctly tinged with tawny, fore-wings tawny, and slightly clouded here and there with brown towards the base; cross-veins more or less clouded with brown; a row of pale brown spots near the tips of the longitudinal veins of the marginal arcolelets; veins tawny, black towards the tips; hind-wings dark brown for more

than one-third of the length from the base. Length of the body 7 lines; of the wings 24 lines.

*a.* Sierra Leone. Presented by T. Whitfield, Esq.

#### 14. OXYPLEURA POLYDORUS, Fem.

*Nervus transversus* 1us *ferè* rectus, valdè obliquus, angulum perobtusum *figens*, 2o plus duplo ejus longitudine *divisus*; 2us *ferè* rectus, valdè obliquus, angulum perobtusum *figens*, 1o *ferè* duplo longior; 3us *subcurvus*, obliquus, angulum subacutum *figens*; 4us *subundatus*, obliquus, angulum subacutum *figens*, 3o multò longior.

Second marginal areolet full five-sixths of the length of the first; first cross vein nearly straight, very slanting, forming an extremely obtuse angle, parted from the second by much more than twice its length; second nearly straight, very slanting, forming an extremely obtuse angle, near twice the length of the first; third very slightly curved, slanting, forming a very slightly acute angle; fourth slightly waved, slanting, forming a slightly acute angle, much longer than the third; fifth curved, nearly upright, forming a slightly acute angle. Body green, short, broad, tinged with tawny: head very much narrower than the fore-chest, adorned with two irregular black bands, which are joined together on each side at the base of the feelers, and include eight tawny spots; face very slightly convex, adorned in front with a pitchy stripe, and with a pitchy band: mouth tawny, with a pitchy tip, reaching a little beyond the hind-hips: eyes not prominent: feelers black: scutcheon of the fore-chest adorned with a black stripe; hind-scutcheon broad, much widened on each side, and forming a nearly right angle, whose hinder part is edged with black: middle-chest adorned with two black U-shaped marks, with four black slanting stripes, and with four black dots; hind border slightly excavated: abdomen obconical, narrower and a little longer than the chest, adorned above with a row of black spots on each side, powdered with white beneath; legs green, tinged with tawny, thighs and fore-shanks streaked with black; feet black, with tawny bands; teeth of the fore-thighs very small: wings colourless; veins green, with black bands towards the base, black towards the tips; cross-veins clouded with brown; primitive areolet green, black towards the tip. Length of the body 12 lines; of the wings 38 lines.

*a, b.* Port Natal. From M. Gueinzus' collection.

## Genus 5. ZAMMARA.

*Zammara*, Amyot et Serville, *Hist. Nat. Hém.* 468, 367.

## 1. ZAMMARA TYMPANUM.

*Zammara tympanum*, Amyot et Serv. *Hist. Nat. Hém.* 468, 1.

*Tettigonia tympanum*, Fab. *Syst. Rhyn.* 40, 36.

*Cicada tympanum*, Germ. *Thon. Arch.* ii, 2, 7. *Silb. Rev. Ent.* ii. 69, 32, f. 22. *Perty, Del. An. Art.* 176, pl. 35, f. 1. *Burm. Handb. Ent.* ii. 1, 183, 7. *Blanch. Hist. Nat. Ins.* iii. 167, 4. *Hém.* pl. 10, f. 1.

*a—c.* Brazil.

## 2. ZAMMARA STREPENS.

*Zammara strepens*, Amyot et Serv. *Hist. Nat. Hém.* 469, 2.

*Cicada tympanum*, Pal. Beauv. *Ins.* 132, *Hém.* pl. 20. f. 5.

*a, b.* Brazil. From Mr. Mornay's collection.

## 3. ZAMMARA SMARAGDINA, Mas.

*Nervus transversus* 1us ferè rectus, valdè obliquus, angulum perobtusum fingens, 2o plus duplo ejus longitudine divisus; 2us subcurvus, obliquus, angulum valdè obtusum fingens, 1o dimidio brevior; 3us subundatus, obliquus, angulum subacutum fingens; 4us subcurvus, obliquus, angulum acutum fingens, 3o paullo brevior

Second marginal arcolet about one-fourth longer than the first: first cross-vein nearly straight, very slanting, forming an extremely obtuse angle, parted from the second by much more than twice its length; second very slightly curved, slanting, forming a very obtuse angle, not half the length of the first; third very slightly waved, slanting, forming a very slightly acute angle; fourth slightly curved, slanting, forming an acute angle, a little shorter than the third; fifth straight, upright, forming an obtuse angle. Body tawny, tinged with green: head very much narrower than the fore-chest, adorned with a large black band, which encloses the eyelets, and sends forth two branches on each side; face convex, black above, pale tawny in front, with a row of black spots on each side, and with two green stripes which enclose a black stripe: mouth pale green, with a black tip, reaching beyond the hind-hips: eyes rather prominent: feelers black, slender: scutcheon of the fore-chest adorned with

seven black stripes ; the middle one linear, very much widened on the fore border, and slightly widened on the hind border ; the next pair forked, partly occupying the furrows ; the following pair on the furrows ; the outer pair on each side ; hind-scutcheon bright green, varied with tawny, slightly waved along the hind border, rather narrow in the middle, much widened, and forming a black nearly right angle on each side : scutcheon of the middle-chest bright green ; disk tawny, adorned with three large black marks, of these the side pair are obconical and the middle one resembles a ↓ reversed ; hind border deeply excavated : abdomen nearly obconical, a little shorter than the chest, mostly pitchy above with the exception of the hind borders of the segments : opercula none ; tymbals pale tawny : drums green, short, hardly parted : legs green, tinged with tawny ; tips of the claws black ; fore-legs adorned with pitchy marks ; fore-thighs armed with two small black teeth : wings colourless ; fore-wings tinged with tawny towards the base, adorned towards the tip with seven large dark brown spots, six of these are at the tips of the fore-areolet of the first second and third discoidal areolets, and of the eighth marginal areolet ; the seventh is the largest, occupies the tip of the wing, and encloses two round colourless spots : a very small brown spot at the base of the eighth marginal areolet ; primitive areolet, fore-flaps, and the base of the hind-flaps green ; veins black, pitchy towards the base, where they are tinged with green. Length of the body 15 lines ; of the wings 47 lines.

a. West Coast of America. Presented by Capt. Kellett and Lieut. Wood.

#### 4. ZAMMARA ANGULOSA, Fem.

*Nervus transversus* 1us subcurvus, valdè obliquus, angulum valdè obtusum fingens, 2o plus duplò ejus longitudine divisus ; 2us rectus, obliquus, angulum obtusum fingens, 1o quadripartito brevior ; 3us subundatus, obliquus, angulum subacutum fingens ; 4us curvus, obliquus, angulum vix acutum fingens, 3o paulò longior.

Second marginal areolet about seven-eighths of the length of the first, slanting, forming a very obtuse angle, parted from the second by much more than twice its length ; second straight, slanting, forming an obtuse angle, not one-fourth of the length of the first ; third slightly waved, slanting, forming a very slightly acute angle ; fourth curved, slanting, forming a hardly acute angle, a little longer than the third ; fifth straight, slightly slanting, forming an obtuse angle. Body dull tawny, short, broad : head much narrower than the fore-chest, adorned with two black oblique stripes, which being united occupy

the space between the eyelets; face convex, adorned in front with blackish bands on each side: mouth tawny, with a black tip reaching the hind hips: eyes not prominent: feelers dark tawny, black at the base: scutcheon of the fore-chest adorned with a black stripe, on each side of which there is a reversed C-shaped mark; furrows blackish; hind-scutcheon widened on each side into a broad rim, and forming a right angle, whose fore side is very slightly convex and its hind side equally concave: scutcheon of the middle-chest adorned with two obconical brown stripes which proceed from the border, and have a cross-shaped brown spot behind them, and a large irregular brown mark on each side; excavation on the hind border of moderate depth: abdomen obconical, hardly longer than the chest: drums very small, far apart: legs dark tawny; feet and tips of the shanks pitchy; claws black, tawny at the base; fore-thighs streaked with black, their teeth hardly rising above the surface: wings colourless, adorned with six large spots, and with one short broad stripe of a pale tawny hue clouded with brown: three of the spots are along the fore border, two in the disk on the cross-veins, and one on the hind border; the stripe occupies half the length of the hind border from the tip, and contains three colourless circles; veins tawny, darker towards the tips. Length of the body 14 lines: of the wings 48 lines.

a. Mexico. From Mr. Argent's collection.

##### 5. ZAMMARA INTRICATA, Mas.

*Nervus transversus* 1us subcurvus, obliquus, angulum valdè obtusum fingens, 2o triplo ejus longitudine dirisus; 2us subcurvus, subobliquus, angulum obtusum fingens, 1i dimidio paulò longior; 3us ferè rectus, valdè obliquus, angulum acutum fingens: 4us subcurvus, subobliquus, angulum rix acutum fingens, 3o multò brevior.

Second marginal areolet a little shorter than the first: first cross-vein very slightly curved, slanting, oblique, forming a very obtuse angle, parted from the second by thrice its length, second very slightly curved, slightly slanting, forming an obtuse angle, little more than half the length of the first; third nearly straight, very slanting, forming an acute angle; fourth slightly curved, slightly slanting, forming a hardly acute angle, much shorter than the third; hind-vein of the fourth discoidal areolet forming an acute angle, whence springs the fifth cross-vein, which is straight and forms a slightly obtuse angle. Body black above, tawny beneath: head much narrower than the fore-chest, adorned with eight

tawny spots, of which the two inner pair are nearly square, and the two outer pair are curved; face very convex, rather prominent: mouth tawny, with a black tip, reaching the hind-hips: eyes black: feelers black, tawny towards the tips: fore-chest broadest in the middle; scutcheon adorned with some tawny marks which resemble a reversed C, and on each side with some more obscure tawny marks; hind-scutcheon green, tinged with tawny, and having a brown spot on each side, which is widened into a projecting and slightly obtuse angle, whose fore side is convex, its hind side concave: scutcheon of the middle-chest adorned with a tawny W-shaped mark, behind which are four short stripes; these are united on the hind border; an obconical, oblique tawny mark on each side; sides and hind border green, the latter rather deeply excavated: abdomen tawny, nearly elliptical, hardly longer than the chest; segments adorned with blackish bands, which are broadest towards the tip: opercula none; tymbals brown, adorned with white bands; drums green, rather small, very little apart; legs tawny; shanks green; feet and fore-shanks black; fore-thighs armed with two small, sharp, green teeth; hind-shanks beset, with a few tawny spines whose tips are black: wings green at the base; fore-wings dark brown, colourless towards the base; the brown part includes some colourless marks which are variable in size, shape and situation; veins black, tawny towards the base of the fore-wings; hind-wings colourless. Length of the body 14 lines; of the wings 40 lines.

*a, b.* Guayaquil. Presented by Dr. J. D. Hooker.

## 6. ZAMMARA MONTEZUMA, MRS.

*Nerrus transversus* 1us *ferè rectus, valdè obliquus, angulum valdè obtusum fignens, 2o plus duplò ejus longitudine divisis; 2us subcurvus, perobliquus, angulum perobtusum fignens, 1o multò longior; 3us subundatus, obliquus, angulum ferè rectum fignens; 4us subcurvus, obliquus, angulum subacutum fignens.*

Second marginal areolet four-fifths of the length of the first: first cross-vein nearly straight, very slanting, forming a very obtuse angle, parted from the second by much more than twice its length; second very slightly curved, extremely slanting, forming an extremely obtuse angle, much longer than the first; third very slightly waved, slanting, forming a nearly right angle: fourth straight with the exception of a slight curve in its upper part, slanting, forming a slightly acute angle; fifth curved abruptly to the hind border, forming a slightly acute angle. Body pale tawny above, greenish

and much powdered with white beneath: head much narrower than the fore-chest, adorned with a black stripe, and with an irregular black band; face slightly convex, adorned in front with two black stripes, on each side of which there are a few black bands: mouth tawny, with a black tip reaching the hind-hips: eyes not prominent; feelers black, tawny at the base: fore-chest broadest in the middle: scutcheon adorned in the middle with two parallel black stripes, which are widened in front; furrows black; hind-scutcheon widened with a black border on each side which forms a very obtuse and slightly rounded angle: scutcheon of the middle-chest adorned with four obconical black marks; the outer pair much longer than the inner pair, and much excavated on the inner side; between the inner pair there is a black cross, and behind it on each side a black dot supported by a short black band; hind-border deeply excavated: abdomen as broad as the chest, almost linear till near the tip, where it is conical; each segment adorned with a pitchy band whose hind border is much excavated: opercula none; tymbals ferruginous, with whitish stripes; drums pale green, of moderate size, rather far apart: legs tawny; tips of the shanks, feet and fore-shanks black; fore-thighs armed with two long sharp black teeth; hind-shanks beset with a few tawny spines: wings colourless, tawny at the base of the fore border, green at the base of the hind border; veins black, ferruginous towards the base; flaps whitish towards the base. Length of the body 20—22 lines; of the wings 57—60 lines.

a. Mexico. Presented by the Entomological Club.

b. ———?

#### 7. ZAMMARA SUFFUSA, Mas.

*Nervus transversus* 1us subcurvus, valdè obliquus, angulum valdè obtusum fingens, 2o ferè triplo ejus longitudine divisus; 2us subcurvus, perobliquus, angulum perobtusum fingens, 1o multò longior; 3us subundatus, obliquus, angulum subacutum fingens; 4us subcurvus, obliquus, angulum acutum fingens, 3o longior.

Second marginal areolet near three-quarters of the length of the first: first cross-vein very slightly curved, very slanting, forming a very obtuse angle, parted from the second by nearly thrice its length; second very slightly curved, extremely slanting, forming an extremely obtuse angle, very much larger than the first; third slightly waved, slanting, forming a slightly acute angle; fourth very slightly curved, slanting, forming an acute angle, longer than the third; fifth curved, forming a hardly acute angle. Body black



above, tawny beneath: head much narrower than the fore-chest; crown adorned with two tawny bands, one in front of the eyelets, the other along the hind border: face slightly convex, not prominent: mouth tawny with a black tip, reaching the hind-hips: feelers black: eyes not prominent: fore-chest broadest in the middle; hind-scutcheon mostly dull red, widened and forming a very obtuse angle on each side: scutcheon of the middle-chest dull red on each side and on the hind border, which is slightly excavated: abdomen very slightly decreasing in breadth from the base to the tip, nearly as broad as the chest and much longer; hind borders of the segments tawny: opercula none; tymbals brown, adorned with white streaks; drums tawny, nearly meeting, rather small: legs tawny; claws black towards the tips; fore-thighs, middle-thighs and fore-shanks spotted with black; fore-thighs armed with two distinct sharp tawny teeth; hind-shanks beset with a few tawny spines: wings very slightly tinged with clear brown, darker towards the tips, dark reddish tawny at the base; cross-veins and brands clouded with dark brown; a rim of brown spots on the tips of the longitudinal veins of the marginal areolets; veins pitchy; flaps of the hind-wings dark reddish tawny towards the base, brown along the fore border. Length of the body 15 lines; of the wings 41 lines.

a. St. Domingo. Presented by M. A. Pierret.

#### 8. ZAMMARA PLENA, Mas.

*Nervus transversus* 1us *ferè rectus, subobliquus, angulum obtusum* *figens*, 2o *plus quadruplo ejus longitudine divisus*; 2us *subcurvus, valde obliquus, angulum perobtusum figens*, 1o *plus duplo longior*; 3us *subundatus, obliquus, angulum acutum figens*; 4us *subcurvus, obliquus, angulum subacutum figens*, 3o *longior*.

Second marginal areolet more than two-thirds of the length of the first: first cross-vein nearly straight, very slightly slanting, forming an obtuse angle, parted from the second by more than four times its length; second slightly curved, very slanting, forming an extremely obtuse angle, much more than twice the length of the first; third very slightly waved, slanting, forming an acute angle; fourth very slightly curved, slanting, forming a slightly acute angle, longer than the third; fifth curved, almost upright, forming a hardly acute angle. Body tawny: head much narrower than the fore-chest, blackish in front; crown adorned with an irregular interrupted black band; face very slightly convex: mouth tawny with a black tip, reaching the hind-hips: eyes rather prominent: feelers

black: hind-scutcheon of the fore-chest widened on each side into a rim; this forms an obtuse angle whose hind side is straight, and its fore side slightly convex: scutcheon of the middle-chest tinged with green, adorned with four broad pitchy stripes; inner pair short, obconical, succeeded by two pitchy dots; outer pair nearly triangular, with several slight pitchy streaks in front; hind border slightly excavated: abdomen nearly oval, a little longer and broader than the chest: drums of moderate size, rather less than half the length of the abdomen, approaching each other beneath: legs tawny; thighs and fore-shanks streaked with black; tips of the claws black; fore-thighs armed with two long teeth: wings with a very slight tawny tinge, tawny at the base; veins green, black towards the tips; first and second cross-veins and the longitudinal vein between the first and the fore border of the wing clouded with brown; flaps tawny at the base, brown along the fore border. Length of the body 13 lines; of the wings 38 lines.

a. Jamaica. From Mr. Gosse's collection.

#### 9. ZAMMARA CUNCTA, Fem.

*Nervus transversus 1us subcurvus, obliquus, angulum obtusum fingens, 2o quinquies ejus longitudine divisus; 2us subcurvus, valde obliquus, angulum perobtusum fingens, 1o multo longior; 3us rectus, erectus, angulum obtusum fingens; 4us curvus, obliquus, angulum obtusum fingens, 3o ferè triplo longior.*

Second marginal areolet full two-thirds of the length of the first; first cross-vein very slightly curved, slanting, forming an obtuse angle, parted from the second by full five times its length; second slightly curved, very slanting, forming an extremely obtuse angle, much longer than the first; third straight, upright, forming an obtuse angle; fourth curved, slanting, forming an obtuse angle, nearly thrice the length of the third; fifth slightly curved, almost upright, forming a hardly obtuse angle. Body dark tawny, paler beneath: head narrower than the fore-chest: face very slightly convex: mouth tawny with a black tip, reaching the hind-hips: eyes not prominent: feelers black, tawny at the base: hind-scutcheon of the fore-chest widened on each side into a rim, which forms an obtuse angle whose hind side is very slightly concave: scutcheon of the middle-chest adorned with four broad pitchy obconical stripes, the outer pair much longer than the inner pair; hind border very slightly excavated: abdomen obconical, slightly compressed towards the tip, rather narrower but not longer than the chest: drums tawny, very small, far apart: legs tawny; tips of the claws black

fore-thighs armed with two rather long teeth: wings colourless, tawny at the base, near which they are slightly adorned with opaline lustre; cross-veins from the first to the fourth clouded with brown: this especially prevails on the first and second, and the adjoining parts of the longitudinal veins are also clouded; a row of indistinct brown spots on the tips of the longitudinal veins of the marginal areolets; veins tawny, darker towards the tips; flaps tawny at the base, streaked with brown along the fore border. Length of the body 12 lines; of the wings 36 lines.

a. Jamaica. From Mr. Gosse's collection.

#### 10. ZAMMARA PRAXITA, Mas.

*Nervus transversus* 1us *ferè rectus, subobliquus, angulum obtusum* *figens*, 2o *plus quinquies ejus longitudine divisus*; 2us *subcurvus, valdè obliquus, angulum perobtusum figens*, 1o *plus duplò longior*; 3us *subundatus, obliquus, angulum acutum figens*, 4us *subundatus, obliquus, angulum acutum figens*, 3o *multo longior*.

Second marginal areolet more than two-thirds of the length of the first: first cross-vein nearly straight, very slightly slanting, forming an obtuse angle, parted from the second by more than five times its length; second slightly curved, very slanting, forming an extremely obtuse angle, a little more than twice the length of the first; third very slightly waved, slanting, forming an acute angle; fourth very slightly waved, slanting, forming an acute angle, very much longer than the third; fifth slightly curved, upright, forming a right angle. Body black, broad, nearly linear, dark tawny beneath: head broad, short, much narrower than the fore-chest, darkened along the hind border; face very short, very slightly convex, pithy on each side in front; mouth dark tawny with a black tip, reaching the hind-hips: eyes not prominent: feelers black: scutcheon of the fore-chest dark red with the exception of a middle black stripe, which is much widened on the fore border and on the hind border; hind-scutcheon rather narrow in the middle, tinged with dark red on each side, where it is very much widened and its broad rim forms a slightly obtuse angle: scutcheon of the middle-chest dark red, but nearly all occupied by the four usual black obconical stripes, the inner pair much shorter than the outer pair, and in advance of a very large black spot which extends across the cross-ridge to the hind border; the latter very slightly excavated: abdomen much longer than the chest, nearly linear till near the tip where it is almost truncated: opercula none; tymbals small, pithy: drums

small, pitchy, not parted: legs dark tawny; thighs black; hind-thighs and fore-shanks mostly pitchy; fore-thighs armed with a long black tooth which is near the tip: wings adorned with a very slight tawny tinge; fore border ferruginous as far as the brand, black thence towards the tip; veins tawny, mostly green in the fore-wings, black towards the tips; cross-veins and the longitudinal vein between the first and the fore border clouded with brown; tip of the longitudinal vein of the sixth marginal areolet clouded with brown; primitive areolet tawny; fore-flaps dark tawny; hind-flaps tawny at the base, and along some part of the fore border, their veins clouded with pale brown. Length of the body 15 lines; of the wings 38 lines.

### 11. ZAMMARA ERATO, Mas.

*Nervus transversus 1us ferè rectus, obliquus, angulum obtusum fingens, 2o plus quadruplo ejus longitudine divisus; 2us subcurvus, valdè obliquus, angulum perobtusum fingens, 1o plus duplo longior; 3us ferè rectus, obliquus, angulum rix acutum fingens; 4us subcurvus obliquus, angulum subacutum fingens, 3o multo longior.*

Second marginal areolet three-fourths of the length of the first: first cross-vein nearly straight, slanting, forming an obtuse angle, parted from the second by much more than four times its length; second slightly curved, very slanting, forming an extremely obtuse angle more than twice the length of the first; third nearly straight, slanting, forming a hardly acute angle; fourth slightly curved, slanting, forming a slightly acute angle, very much longer than the third; fifth curved, nearly upright, forming a right angle. Body black, broad, nearly linear, dark tawny beneath: head broad, short, much narrower than the fore-chest, mostly dark red along the hind border; face very short, very slightly convex, adorned on each side with a dark red stripe: mouth dark tawny, black towards the tip, reaching the hind-hips: eyes not prominent: feelers black: scutcheon of the fore-chest adorned with six large dark red spots, the inner pair brighter and more distinct than the other four; hind-scutcheon very much widened on each side where its broad rim forms a slightly obtuse angle: scutcheon of the middle-chest tinged with dark red on each side; hind border very slightly excavated: abdomen a little longer than the chest, a little increasing in breadth along half the length, obconical from thence to the tip: opercula none; tymbals small, tawny, adorned with a pitchy circle; drums pitchy, small, not parted: legs ferruginous; hips and trochanters

marked with black; thighs and fore-shanks black; claws black, tawny at the base; fore-thighs armed near the tips with two black teeth, one of moderate size, the other extremely small: wings slightly tinged with tawny, adorned with blue opaline lustre: fore border black with a tawny vein beneath; veins tawny, black towards the tips; first and second cross-veins and the space between them and the fore border deeply clouded with dark brown; a small brown spot on the third cross-vein; primitive areolet tawny; fore-flaps brownish tawny; hind-flaps tawny at the base and along part of the hind border, tinged with dark brown along the veins. Length of the body 14 lines; of the wings 39 lines.

a. Jamaica. From Mr. Gosse's collection.

### Genus 6. THOPHA.

*Thopha*, *Amyot et Serv. Hist. Nat. Hém.* 471, 372.

#### 1. THOPHA SACCATA.

*Thopha saccata*, *Amyot et Serv. Hist. Nat. Hém.* 471, 1.

*Tettigonia saccata*, *Fabr. Syst. Rhyn.* 34, 9.

*Cicada saccata*, *Germ. Thon. Arch.* ii. 2, 5, 57. *Guer. Mag. Zool.* 80, pl. 238.

a. New Holland. Presented by the Earl of Derby.

b. New Holland. Presented by Dr. Sinclair.

c.—f. New Holland.

#### 2. THOPHA PERULATA.

*Thopha perulata*, *Amyot et Serv. Hist. Nat. Hém.* 471, 2.

*Cicada perulata*, *Guerin, Voy. aut. du Monde*, 180, pl. 10, f. 5, 5 a.

a—c. New Holland.

#### 3. THOPHA VARIA, Mas.

*Nervus transversus* 1us *ferè rectus, obliquus, angulum valdè obtusum* *figens*, 2o *ejus longitudine quadruplò divisus*; 2us *subcurvus, obliquus, angulum valdè obtusum* *figens*, 1o *multo longior*; 3us *subcurvus, obliquus, angulum ferè rectum* *figens*; 4us *subrectus, obliquus, angulum acutum* *figens*, 3o *multo longior*.

Second marginal areolet full seven-eighths of the length of the first: first cross-vein nearly straight, slanting, forming a very obtuse angle, parted from the second by about four times its length; second slightly curved, slanting, forming a very obtuse angle, much longer than the first; third slightly curved, slanting, forming a nearly

right angle; fourth nearly straight, slanting, forming an acute angle, much longer than the third; fifth nearly upright, slightly curved forming a hardly acute angle. Body tawny, partly clothed with pale yellow or white down, rather broad: head a little narrower than the fore-chest; a broad black band occupies the crown and includes two tawny dots on each side of the eyelets; face blackish, convex but not prominent: mouth ferruginous with a pitchy tip, extending a little beyond the middle-hips: eyes prominent: feelers dark tawny, pitchy towards the base: scutcheon of the fore-chest adorned with two broad black stripes widened in front and occupying the whole fore border, united and more slightly widened on the hind border; hind-scutcheon broad, widened and almost angular at the base of each fore-wing, slightly excavated on each side: disk of the scutcheon of the middle-chest black, adorned with two large forked tawny marks, on each side of which there is an oblique ferruginous stripe, hind border tawny, very slightly excavated in the middle, whence two short tawny branches proceed towards the forked spots: abdomen black, obconical, longer than the chest; hind borders of the segments and tip tawny beneath: opercula large, pale tawny; drums very large, pale tawny, tinged with green, overlapping, occupying rather less than half the length of the abdomen: legs ferruginous; streaks of the thighs, tips of the shanks, and spines of the hind-shanks pitchy; claws black; fore-thighs armed with black teeth of moderate size: wings almost colourless, tawny at the base; veins ferruginous, tawny towards the base, where they are partly black, very slightly clouded with tawny towards the tips; first and second cross-veins and the longitudinal vein beyond them clouded with brown: flaps whitish towards the base and along the fore border. Length of the body 17 lines; of the wings 48 lines.

#### 4. THOPHA CHLOROMERA, Mas.

*Nervus transversus* 1us ferè rectus, valdè obliquus, angulum perobtusum fingens, 2o plus triplò ejus longitudine divisus; 2us curvus, valdè obliquus, angulum perobtusum fingens, 1o longior; 3us subundatus, obliquus, angulum rectum fingens; 4us subundatus, obliquus, angulum acutum fingens.

First cross-vein nearly straight, very slanting, forming an extremely obtuse angle, parted from the second by more than thrice its length; second curved, very slanting, forming an extremely obtuse angle, longer than the first; third slightly waved, slanting, forming a right angle; fourth slightly waved, slanting, forming an acute

angle, a little longer than the third; fifth almost upright, very slightly curved, forming a nearly right angle. Body black above, tawny and tinged with green beneath: head a little narrower than the fore-chest, adorned with several small tawny marks, and on each side of the front with one of larger size; face slightly convex, not at all prominent, adorned with a pale tawny elliptical mark, tawny with blackish bands on each side in front: mouth tawny with a pitchy tip, reaching the middle-hips: eyes rather prominent: scutcheon of the fore-chest adorned with two oblique black stripes, which are united behind; fore border black excepting a little interval in the middle; hind-scutcheon adorned on each side with three greenish-tawny spots, one large, the other two small; sides not angular, but slightly excavated in front and slightly convex near the base of each fore-wing: scutcheon of the middle-chest adorned with a tawny slender double U-shaped mark whose inner sides are interrupted in front and behind; on each side of this are two oblique tawny stripes which are united behind; the middle pair are broader than the outer pair, and their inner sides are excavated; hind border slightly excavated in the middle; cross-ridge tawny: abdomen obconical, longer than the chest, black above, tawny beneath: drums very large, pale tawny, much more than half the length of the abdomen, slightly overlapping: legs green, streaked with tawny; fore-thighs armed with two stout black teeth; spines of the hind-shanks ferruginous with black tips: wings colourless, bright green at the base; veins ferruginous, green towards the base and along half the length of the fore border; first and second cross-veins clouded with brown. Length of the body 17 lines; of the wings 48 lines.

### Genus 7. CYCLOCHILA.

*Cyclochila*, Amyot et Serr. *Hist. Nat. Hém.* 470, 370.

#### 1. CYCLOCHILA AUSTRALASIE.

*Cyclochila Australasie*, Amyot et Serr. *Hist. Nat. Hém.* 470, 1.

*Tettigonia Australasie*, Donov. *Ins. New. Holl. Hém.* pl. 2, f. 1.

*Cicada australis*, Leach.

*Cicada olivacea*, Germ. *Thon. Arch.* ii. 2, 8.; *Silb. Rev. Ent.* ii.

57, 4. *Burm. Handb. Ent.* ii. 1, 182, 6.

a, b. New Holland. Presented by Dr. Sinclair.

c. New Holland. Presented by J. G. Children, Esq.

d, e. New Holland. Presented by F. Walker, Esq.

f. New Holland.

2. *CYCLOCHILA HONESTA*, Mas et Fem.

*Nervus transversus* 1us *vix* curvus, obliquus, angulum valdè obtusum fingens, 2o paullo plus duplo ejus longitudine divisus; 2us curvus, subobliquus, angulum obtusum fingens, 1o multo brevior; 3us subundatus, subobliquus, angulum *vix* obtusum fingens; 4us *ferè* rectus, obliquus, angulum subacutum fingens, 3o multo longior.

Second marginal areolet seven-eighths of the length of the first: first cross-vein hardly curved, slanting, forming a very obtuse angle, parted from the second by a little more than twice its length; second curved, slightly slanting, forming an obtuse angle, much shorter than the first; third slightly waved, slightly slanting, forming a hardly obtuse angle; fourth very nearly straight, slanting, forming a slightly acute angle, much longer than the third: fifth very slightly curved, nearly upright, forming a hardly acute angle.

*Male*.—Body pale tawny, short and broad: head narrower than the fore-chest; face slightly prominent, tinged with green; mouth tawny with a darker tip, reaching the middle-hips: eyes not prominent: feelers green at the base: scutcheon of the fore-chest tinged with green in the middle of the front; hind-scutcheon green along the hind border, and on each side where the rims are narrow and slightly waved, but not angular: hind border of the scutcheon of the middle-chest very slightly excavated: abdomen obconical, much longer but hardly broader than the chest, slightly compressed towards the tip which is somewhat tinged with green: drums green, small, not more than one-sixth of the length of the abdomen, some distance apart: legs tinged with green; feet tawny; claws black, tawny at the base; fore-thighs armed with two green teeth of moderate size: wings colourless, green at the base; veins green, partly tawny at the base and along the fore border; fore-flaps and the base of the hind-flaps bright pale red.

*Fem*.—Abdomen shorter and a little broader than that of the male, a little broader and longer than the chest.

Length of the body 20 lines; of the wings 64 lines.

a. Brazil. From Mr. Mornay's collection.

b. ———?



## Genus 8. TACUA.

Tacua, *Amyot et Serv. Hist. Nat. Ins. Hém.* 461.

## 1. TACUA SPECIOSA.

Tacua speciosa, *Amyot et Serv. Hist. Nat. Ins. Hém.* 462, 1.

Tettigonia speciosa, *Illiger, Wied. Zool. Arch.* ii. 145, 38, pl. 2.

*Fabr. Syst. Rhyn.* 33, 1.

Cicada indica, *Donor. Ins. Ind. Hém.* pl. 2, f. 3.

Cicada speciosa, *Blanch. Hist. Nat. Ins.* iii. 165, 1. *Hém.* pl. 9.

*Hab.* ———?

## Genus 9. TOSENA.

Tosena, *Amyot et Serv. Hist. Nat. Hém.* 462.

## 1. TOSENA FASCIATA.

Tosena fasciata, *Amyot et Serv. Hist. Nat. Hém.* 462, 1.

Tettigonia fasciata, *Fabr. Mant. Ins.* ii. 265, 2. *Ent. Syst.* iv. 17,

2. *Syst. Rhyn.* 34, 3. *Stoll, Cic.* i. 27, pl. 4, f. 16.

Cicada fasciata, *Oliv. Enc.* v. 747, 2, pl. 109, f. 1. *Germ. Thon's*

*Arch.* ii. 2, 11.; *Silberm. Rev. Ent.* ii. 75, 49. *Blanch. Hist.*

*Nat. Ins.* iii. 165, 2.

*a, b.* Java. Presented by J. G. Children, Esq.

## 2. TOSENA MELANOPTERA.

Tosena melanoptera, *White, Ann. Nat. Hist.* 1846, xvii. 331.

*a—d.* Silhet. From the Rev. J. Stainforth's collection.

*e.* East India. Presented by E. Doubleday, Esq.

*f.* North India. From Mr. L. James' collection.

## 3. TOSENA MEARESIANA.

Tosena Mearesiana, *Westw. Arc. Ent.* 1842, 98, pl. 25, f. 1, *Amyot et Serv. Hist. Nat. Hém.* 463.

*a, b.* N. India. From Mr. L. James' collection.

## 4. TOSENA DIVES.

Tosena dives, *Westw. Arc. Ent.* 1842, 98, pl. 25, f. 2. *Amyot et Serv. Hist. Nat. Hém.* 464.

## Genus 10. DUNDUBIA.

Dundubia, *Amyot et Serv. Hist. Nat. Hém.* 470, 371.

## 1. DUNDUBIA IMPERATORIA.

*Cicada imperatoria*, *Westw. Arc. Ent.* ii. 13, pl. 51.

*a.* Borneo. Presented by the Admiralty.

*b.* ——— ?

## 2. DUNDUBIA OBTECTA.

*Tettigonia obsecta*, *Fabr. Syst. Rhyn.* 35, 11.

*a—c.* Nepaul. Presented by Major-General Hardwicke.

*d.* North Bengal. From Miss Campbell's collection.

*e, f.* North India. From Mr. Warwick's collection.

*g.* Assam. From Mr. Warwick's collection.

*h, i.* ——— ?

## 3. DUNDUBIA SPINOSA.

*Tettigonia spinosa*, *Fabr. Mant. Ins.* ii. 266, 6. *Ent. Syst.* iv. 17.

6. *Syst. Rhyn.* 348.

*Cicada spinosa*, *Oliv. Enc. Méth.* v. 748, 8.

*a, b.* Philippine Islands. From Mr. Cuming's collection.

## 4. DUNDUBIA VAGINATA.

*Dundubia vaginata*, *Amyot et Serv. Nat. Hém.* 471, 1.

*Tettigonia vaginata*, *Fabr. Mant. Ins.* ii. 266, 7. *Ent. Syst.* iv. 18, 7. *Syst. Rhyn.* 35, 10.

*Cicada vaginata*, *Oliv. Enc. Méth.* v. 748, 10. *Gmel. Ed. Syst. Nat.* i. 3, 2099, 71. *Stoll, Cic.* 38, pl. 7. f. 35.

*a, b.* ——— ? Presented by J. G. Children, Esq.

*c.* ——— ? Presented by the Entomological Club.

*d.* Assam. From Mr. Warwick's collection.

## 5. DUNDUBIA CHLOROGASTER.

*Cicada chlorogaster*, *Boisd. Voy. Astrol.* ii, 614. *Hém.* pl. 10. f. 4.

*a, b.* ——— ?

## 6. DUNDUBIA DORYCA.

*Cicada doryca*, *Boisd. Voy. Astrol.* ii. 609. *Hém.* pl. 10, f. 3.

## 7. DUNDUBIA VARIANS.

*Cicada varians*, Germ. Silb. Rev. Ent. ii. 59, 10.

a. New Holland. Presented by the Haslar Hospital.

## 8. DUNDUBIA LINEARIS, Mas.

*Nervus transversus* 1us valdè curvus, vix obliquus, angulum rectum fingens, 2o plus duplò ejus longitudine divisus; 2us subcurvus, obliquus, angulum obtusum fingens, 1o vix brevior; 3us valdè curvus, obliquus, angulum acutum fingens; 4us curvus, subobliquus, angulum subacutum fingens, 3o brevior.

Second marginal areolet nearly seven-eighths of the length of the first: first cross-vein very much curved, hardly slanting, forming a right angle, parted from the second by much more than twice its length: second slightly curved, slanting, forming an obtuse angle, nearly as long as the first; third very much curved in its fore part, slanting, forming an acute angle; fourth curved, slightly slanting, forming a very slightly acute angle, shorter than the third; fifth nearly straight, forming a slightly obtuse angle. Body tawny beneath: head and chest pitchy; head and fore-chest adorned with indistinct tawny marks, which are mostly along the sutures: head narrower than the fore-chest; face convex, rather prominent, pitchy towards the mouth; the latter tawny with a black tip, reaching the hind borders of the drums: eyes prominent: feelers black: fore-chest broadest at the base of the fore-wings; scutcheon adorned with six pale tawny stripes which proceed from the fore border to the disk; hind-scutcheon much widened on each side, which is slightly concave in the middle part, slightly convex before and behind: hind border of the scutcheon of the middle-chest slightly excavated: breast green: abdomen ferruginous, nearly linear till towards the tip, where it is conical, about twice the length of the chest; sutures of the segments black: opercula dark ferruginous; drums green, rather large, hardly apart: legs tawny; fore-thighs armed with two sharp, tawny teeth: tips of the feet and of the claws black: wings with an indistinct tawny tinge, slightly coloured with green, pale brown and marked with black at the base; fore border greenish; cross-veins clouded with brown: a row of small brown spots on the tips of the longitudinal veins of the marginal areolets; veins adorned with alternate black and pale yellow bands; veins of the hind-wings tawny; cross-veins darker; flaps pale brown at the base. Length of the body 22 lines; of the wings 56 lines.

a ——— ?

## 9. DUNDUBIA CINCTIMANUS, Mas.

*Nervus transversus 1us curvus subobliquus, angulum subobtusum fingens, 2o plus duplò ejus longitudine divisus; 2us subcurvus, obliquus, angulum obtusum fingens, 1o brevior; 3us undatus, valdè obliquus, angulum acutum fingens; 4us curvus, ferè erectus, angulum rectum fingens, 3o multo longior.*

Second marginal areolet full seven-eighths of the length of the first: first cross-vein curved, very slightly slanting, forming a slightly obtuse angle, parted from the second by much more than twice its length; second very slightly curved, slanting, forming an obtuse angle, shorter than the first; third waved, very slanting, forming an acute angle; fourth curved, nearly upright, forming a right angle, much longer than the third; fifth straight, very slightly slanting, forming a slightly obtuse angle. Body dark tawny, paler beneath: head narrower than the fore-chest: face very convex: mouth tawny with a black tip, reaching a little beyond the hind-hips: eyes prominent: feelers black, tawny at the base: hind-scutcheon of the fore-chest partly green, adorned with five pitchy spots, widened near the base of each fore-wing, and forming an obtuse angle whose hind side is very slightly concave; sides excavated: scutcheon of the middle-chest greenish on each side, adorned with four broad, pitchy, obconical stripes, the outer pair much longer than the inner pair, and enclosing tawny ramifications; hind border very slightly excavated: abdomen longer and rather narrower than the chest, obconical, slightly compressed towards the tip: opercula very small: drums green, small, apart: legs tawny; tips of the claws black; fore-feet and middle-feet black, tawny at the base; fore-thighs armed with three rather long, black teeth; of these two are of moderate size, and one very small; wings slightly tinged with tawny; cross-veins from the first to the fourth clouded with brown, especially the first and the second, where the adjoining parts of the longitudinal veins are also clouded; a row of indistinct brown spots on the tips of the longitudinal veins of the marginal areolets; veins black, adorned with whitish bands, tawny at the base and at the tips; flaps tawny at the base, with a brown streak along the fore border. Length of the body 18 lines; of the wings 48 lines.

*a.* Silhet. From Mr. Sowerby's collection.

## 10. DUNDUBIA IMMACULA, Mas.

*Nervus transversus* 1us subcurvus, obliquus, angulum obtusum fin-  
gens, 2o plus duplo ejus longitudine divisus; 2us subcurvus,  
obliquus, angulum obtusum fngens, Vi dimidio non longior;  
3us subundatus, subobliquus, angulum vix acutum fngens;  
4us rectus, subobliquus, angulum rectum fngens, 3o multo  
longior.

Second marginal arcolet more than two-thirds of the length of the first: first cross-vein slightly curved, slanting, forming an obtuse angle, parted from the second by much more than twice its length; second very slightly curved, slanting, forming an obtuse angle, about half the length of the first; third very slightly waved, slightly slanting, forming a hardly acute angle; fourth straight, very slightly slanting, forming a right angle, much longer than the third; fifth much curved, slightly slanting, forming a hardly acute angle. Body fawn-colour: head a little narrower than the fore-chest; face prominent, very convex: mouth fawn-colour with a black tip, reaching the middle-hips: eyes prominent: feelers tawny: fore-chest broadest near the base of each fore-wing; scutcheon slightly tuberculate; hind-scutcheon broad, finely furrowed, slightly excavated on the hind border, widened, and forming a very obtuse angle near the base of each fore-wing, armed with a very small tooth on each side: disk of the scutcheon of the middle-chest black; hind border slightly excavated: abdomen slightly obconical, much longer than the chest; opercula pale fawn-colour; drums pale fawn-colour, far apart, very large, extending to three-fourths of the length of the abdomen: legs tawny; fore-thighs armed with three tawny teeth; of these two are of moderate size, and one very small: wings whitish, tawny at the base; an almost imperceptible fawn-coloured tinge in the fore-wings; veins fawn-colour, with the exception of two which are black; the one is on the fore-border, the other on the hind border of the fore-wings: flaps tawny at the base. Length of the body 19 lines; of the wings 48 lines

a. Tenasserim. Presented by — Packman, Esq.

## 11. DUNDURIA STIPATA, Mas.

*Nervus transversus* 1us valdè curvus, obliquus, angulum obtusum fingens, 2o plus duplò ejus longitudine divisus; 2us valdè curvus, obliquus, angulum obtusum fingens, 1o paullo longior; 3us curvus, obliquus, angulum acutum fingens; 4us subcurvus, obliquus, angulam subacutum fingens, 3o paullo brevior.

Second marginal areolet more than two-thirds of the length of the first: first cross-vein much curved, slanting, forming an obtuse angle, parted from the second by more than twice its length; second much curved, slanting, forming an obtuse angle, a little longer than the first; third curved, slanting, forming an acute angle; fourth very slightly curved, slanting, forming a slightly acute angle a little shorter than the third; fifth very slightly curved, slightly slanting, forming an obtuse angle. Body tawny: head much narrower than the fore-chest, blackish about the eyelets; face very convex: mouth tawny with a black tip, reaching a little beyond the hind-hips: eyes very prominent: feelers tawny, pitchy at the base: fore-chest broadest near the base of the fore-wing; scutcheon adorned with four black stripes, the middle pair widened in front and behind, the side pair short; furrows black; hind-scutcheon narrow in the middle, much widened and slightly angular at the base of each fore-wing, hardly notched, but armed with a small tooth on each side: scutcheon of the middle-chest adorned with five black stripes, the inner pair shortened behind, but succeeded by two black spots; some slight streaks in front between the inner and the outer pair, the latter accompanied by some marks, which give a mottled appearance to the scutcheon; hind border very slightly excavated: abdomen nearly spindle-shaped, twice the length of the chest; a pitchy mark on each side of every segment; tip blackish: opercula extremely small: tymbals white with brown bands; drums small, pale green, hardly overlapping, not extending beyond the base of the abdomen: legs tawny; tips of the hind-shanks darker; claws black towards the tips; fore-thighs armed with two rather long teeth: wings colourless, tawny at the base; fore-wings very slightly tinged with brown; veins alternately black and tawny; the latter colour prevails most towards the base; first second and third cross-veins clouded with brown; a row of brown spots on the tips of the veins of the marginal areolets; flaps tawny at the base. Length of the body 17 lines; of the wings 37 lines.

*a.* Ceylon. From the Rev. J. Wenham's collection.

## 12. DUNDUBIA PHEOPHILA, Mas.

*Nervus transversus* 1us subcurvus, subobliquus, angulum obtusum fingens, 2o plus duplo ejus longitudine divisus; 2us subcurvus, obliquus, angulum valdè obtusum fingens, 1o rix brevior; 3us subcurvus, obliquus, angulum subacutum fingens; 4us subcurvus, subobliquus, angulum subacutum fingens, 3o paulò brevior.

Second marginal arcolet four-fifths of the length of the first: first cross-vein slightly curved, slightly slanting, forming an obtuse angle, parted from the second by much more than twice its length; second slightly curved, slanting, forming a very obtuse angle, nearly as long as the first; third very slightly curved, slanting, forming a slightly acute angle; fourth very slightly curved, slightly slanting, forming a slightly acute angle, a little shorter than the third: fifth slightly curved, slanting, forming a slightly obtuse angle. Body brownish tawny: head a little narrower than the fore-chest; black about the eyelets, adorned with two black spots on each side; face very convex, adorned with black bands on each side: mouth tawny with a black tip, reaching the hind-hips: feelers black: eyes prominent: fore-chest broadest near the base of the fore-wings; scutcheon adorned with two black stripes; hind-scutcheon tawny, slightly widened and rounded near the base of each fore-wing, not notched, but armed with a very small tooth on each side: scutcheon of the middle-chest armed with five black stripes and with two black dots, the latter near the hind border; the outer pair of stripes are in front, the inner pair behind; hind border very slightly excavated: abdomen obconical, a little longer than the chest: opercula tawny; drums tawny, with broad black bands, obconical, very large, slightly concave in the middle of the outer border, extending near to the tip of the abdomen: legs tawny; tips of the claws black; tips of the four hinder-shanks black; fore-thighs armed with three teeth, one very small; spines of the hind-shanks black; fore-feet pitchy: wings tinged with pale brown, which is most prevalent at the tips; first and second cross-veins clouded with dark brown; veins black, tawny towards the base; flaps brown towards the base. Length of the body 15 lines; of the wings 46 lines.

a, b. Corca. Presented by Sir E. Belcher.

## 13. DUNDUBIA RAMIFERA, Mas.

*Nercus transversus* 1us subcurvus, subobliquus, angulum subacutum fignens, 2o fere triplò ejus longitudine divisus; 2us rectus, subobliquus, angulum obtusum fignens, 1o multò brevior; 3us subcurvus, obliquus, angulum acutum fignens; 4us subrectus, subobliquus, angulum subacutum fignens, 3o multò brevior.

This species and *D. cinctimanus* are very nearly allied, but the fourth cross-wing vein of the former is more upright than that of the latter.

Second marginal areolet full seven-eighths of the length of the first: first cross-vein slightly curved, slightly slanting, forming a slightly acute angle, parted from the second by nearly thrice its length; second straight, slightly slanting, forming an obtuse angle, much shorter than the first; third slightly curved, slanting, forming an acute angle; fourth nearly straight, slightly slanting, forming a very slightly acute angle, much shorter than the third; fifth straight, slanting, forming an obtuse angle. Head and fore-chest pitchy, adorned with some indistinct tawny marks: head a little narrower than the fore-chest; face convex, black and adorned with broad yellow bands in front: mouth tawny with a black tip, extending to the hind borders of the drums: eyes very prominent: feelers black: fore-chest broadest near the base of the fore-wings; hind-scutcheon green, excavated, adorned with two brown spots and much widened on each side: scutcheon of the middle-chest black, tawny on each side and behind, adorned on the disk with two tawny stripes, which are each divided in front into three branches; between these are two short stripes forming an angle in front and with two black spots behind them; hind border slightly excavated: breast tawny: abdomen ferruginous, shining, very much longer than the chest, tapering from the base to the tip; opercula tawny; drums dark tawny; of moderate size, not apart: legs tawny; feet and fore-shanks black; middle-feet and perhaps the other feet pale tawny at the base: fore-thighs armed with two sharp, black teeth: wings with an extremely slight brown tinge, brown at the base, tawny along the fore border and in the adjoining part of the base; cross-veins clouded with brown; a row of slight brown spots near the tips of the marginal areolets; veins adorned with alternate black and pale tawny bands; veins of the hind-wings ferruginous; cross-veins darker; flaps brown towards the base. Length of the body 18 lines; of the wings 47 lines.

a. Silhet. From the Rev. J. Stainforth's collection.



## 14. DUNDUBIA VIBRANS, Mas.

*Nervus transversus* 1us subcurvus obliquus, angulum obtusum fingens, 2o ferè triplo ejus longitudine divisus; 2us subcurvus, obliquus, angulum obtusum fingens, 1o multò brevior; 3us subundatus, obliquus, angulum subacutum fingens; 4us subundatus, obliquus, angulum subacutum fingens, 3o longior.

Second marginal arcolet three-fourths of the length of the first: first cross-vein slightly curved, slanting, forming an obtuse angle, parted from the second by nearly thrice its length; second very slightly curved, slanting, forming an obtuse angle, much shorter than the first; third slightly waved, slanting, forming a slightly acute angle; fourth slightly waved, slanting, forming a slightly acute angle, larger than the third; fifth curved, nearly upright, forming a slightly acute angle. Body pale tawny, rather long: head a little narrower than the fore-chest, adorned with an irregular and interrupted black band; face very convex, adorned with black bands on each side: mouth tawny with a black tip, reaching to the hind-hips: eyes prominent: feelers black: fore-chest broadest near the base of the fore-wing: scutcheon adorned with four crooked black streaks, the outer pair short; sutures also blackish; hind-scutcheon widened and adorned with two large black spots above the base of each fore-wing, slightly notched and armed with a moderate-sized tooth on each side: scutcheon of the middle-chest adorned with five black stripes; a slight black streak in front between the two side pairs, which are slightly oblique; the inner pair much shorter than the outer pair, which are almost interrupted; hind border very slightly excavated: abdomen rather long, nearly linear, much longer than the chest; a short black stripe at the base and on each side of the tip; disks of the segments pitchy: opercula tawny, close; drums bright tawny, bordered with black, about half the length of the abdomen, narrow towards the base; widened towards the tips: legs pale tawny, clothed with paler hairs; tips of the shanks and of the feet pitchy; tips of the claws black, fore-thighs armed with three teeth, two large and one small; hind-shanks beset with black spines: wings colourless, pale tawny at the base; tips of the fore-wings slightly clouded with brown; first and second cross-veins clouded with brown; an almost imperceptible brown streak on each marginal arcolet; veins partly black, partly tawny, the latter colour prevailing most towards the base; flaps pale tawny at the base. Length of the body 17 lines; of the wings 44 lines.

*a, b.* Silhet. From the Rev. J. Stainforth's collection.

15. *DUNDURIA MICRODON*, Mas.

*Nervus transversus*, 1us *curvus*, *obliquus*, *angulum obtusum fingens*, 2o *triplo ejus longitudine divisus*; 2us *subrectus valde obliquus*, *angulum valde obtusum fingens*, 1i *dimidio vix longior*; 3us *subundatus*, *obliquus*, *angulum vix acutum fingens*; 4us *subrectus*, *obliquus*, *angulum acutum fingens*, 3o *longior*.

Second marginal areolet three-fourths of the length of the first; first cross-vein curved, slanting, forming an obtuse angle, parted from the second by thrice its length; second nearly straight, very slanting, forming a very obtuse angle, hardly more than half the length of the first; third very slightly waved, slanting, forming a hardly acute angle; fourth nearly straight, slanting, forming an acute angle, longer than the third; fifth curved, forming a slightly acute angle. Body black: head a little narrower than the fore-chest, adorned with a tawny and green stripe in front, and with a green irregular circlelet on each side of the eyelets; face convex, adorned above with a short yellow stripe, and in front with yellow bands: mouth tawny with a black tip, reaching the hind-hips: eyes very prominent: feelers black: fore-chest green, broadest near the base of the fore-wings; scutcheon adorned with four slightly waved black stripes, the outer pair very short; furrows black; hind-scutcheon green, widened and slightly angular on each side, in front of which there is a very small tooth: scutcheon of the middle-chest adorned with four green stripes, the outer pair much longer than the inner pair; a green dot near each side, which like the hind border is also green; the latter is slightly excavated: breast tawny: abdomen black, shining, tapering from the base to the tip, brown beneath; hind borders of the segments green: opercula black; drums dull green, blackish towards the tips, tapering, very long, not far apart, more than half the length of the abdomen: legs tawny; thighs striped with black; fore-shanks, feet, and tips of the other shanks black; fore-thighs armed with three black teeth, of these two are long, and one very small; a tawny band on each middle-foot: wings colourless, green at the base; first and second cross-veins clouded with brown; a row of small pale brown spots on the tips of the longitudinal veins of the marginal areolets; veins black; flaps adorned with opaline lustre. Length of the body 16 lines; of the wings 42 lines.

a. North India. Presented by Dr. Wallich.

## 16. DUNDUBIA OPALIFERA, Mas.

*Nervus transversus* 1us curvus, obliquus, angulum valdè obtusum fingens, 2o ferè triplò ejus longitudine divisus; 2us subrectus, obliquus, angulum valdè obtusum fingens, 1o multò brevior; 3us subcurvus, subobliquus, angulum ferè rectum fingens; 4us subcurvus, obliquus, angulum ferè rectum fingens, 3o paullò brevior.

Second marginal areolet nearly three-fourths of the length of the first: first cross-vein curved, slanting, forming a very obtuse angle, parted from the second by nearly thrice its length; second nearly straight, slanting, forming a very obtuse angle, very much shorter than the first; third very slightly curved, slanting, forming a nearly right angle; fourth very slightly curved, slightly slanting, forming a nearly right angle, a little shorter than the third; fifth slightly curved, nearly upright, forming a nearly right angle. In the right wing of the insect described, the fourth cross-vein is shortened by means of a little additional areolet between the third and fourth discoidal areolets. Body black: head a little narrower than the fore-chest, adorned with an irregular tawny border; face convex; its front and the sides of the breast tawny: mouth tawny with a black tip, reaching nearly to the hind-hips: feelers black, tawny at the base: eyes prominent: scutcheon of the fore-chest adorned with a tawny disk, which has three black stripes on each side; hind-scutcheon tawny with two black spots at the base of each fore-wing, where the border is also black, edged with black, and armed with a small tooth on each side: scutcheon of the middle-chest tawny; its disk black, adorned with two tawny stripes which have between them a double U-shaped mark, and behind them are two short tawny streaks; the stripes send out two oblique branches, one linear, the other club-shaped; hind border slightly excavated: abdomen black, tapering from the base to the tip, brown beneath: opercula pitchy: drums pointed, black, rather large, not far apart, not more than half the length of the abdomen: legs tawny; thighs streaked with black; tips of the thighs and of the feet black; fore-thighs armed with three rather long black teeth; spines of the hind-shanks black: wings colourless, adorned with opaline lustre, tawny along the fore border, pale tawny with pitchy marks at the base; veins tawny; first and second cross-veins clouded with brown; fore-flaps brown; hind-flaps brown at the base. Length of the body 15 lines; of the wings 39 lines.

a. Corea. Presented by Sir E. Belcher.

## 17. DUNDUBIA NIGRISTIGMA, Mas.

*Nervus transversus* 1us subcurvus, subobliquus, angulum rectum fingens, 2o plus duplo ejus longitudine divisus; 2us valde curvus, obliquus, angulum subobtusum fingens, 1o longior; 3us subcurvus, subobliquus, angulum subacutum fingens; 4us subcurvus, subobliquus, angulum subacutum fingens, 3o longior.

Second marginal areolet about five-sixths of the length of the first: first cross-vein slightly curved, slightly slanting, forming a right angle, parted from the second by much more than twice its length: second much curved, slanting, forming a slightly obtuse angle, longer than the first; third very slightly curved, slightly slanting, forming a very slightly acute angle; fourth very slightly curved, slightly slanting, forming a very slightly acute angle, longer than the third; fifth nearly straight, slanting, forming an obtuse angle. Body dull tawny: head much narrower than the fore-chest: crown adorned with two black bands, which are arranged in an elliptical form; face convex: mouth tawny with a black tip, reaching the hind-hips: eyes prominent: feelers black: fore-chest broadest near the base of the fore-wings: scutcheon adorned with two black stripes which are widened in front and with two black reversed C-shaped marks; furrows black: hind-scutcheon narrow in the middle, much widened and slightly angular by the base of each fore-wing, armed with two teeth on each side: scutcheon of the middle-chest adorned with four black stripes and on the hind border with four black dots; middle stripes broad in front, united behind; hind border very slightly excavated: abdomen obconical, much longer than the chest; hind borders of the segments adorned with black bands whose outlines are very irregular; disk beneath and tip black: opercula dull tawny, large, nearly meeting on the back; drums tawny, small, not extending beyond the base of the abdomen: legs tawny; fore-shanks, fore-feet and tips of the shanks and of the feet black; claws black towards the tips; fore-thighs armed with two rather long black teeth: wings very slightly tinged with brown; veins black, tawny along the fore border with the exception of the brand, which is black; cross-veins clouded with brown; a row of very small brown spots on the tips of the longitudinal veins of the marginal areolets; flaps brown at the base. Length of the body 10 lines; of the wings 28 lines.

a. Philippine Islands. From Mr. Cuming's collection.

## 18. DUNDUBIA ABLISTIGMA, Mas.

*Nervus transversus* 1us subcurvus, obliquus, angulum acutum fingens, 2o plus duplò ejus longitudine divisus; 2us subcurvus, erectus, angulum subobtusum fingens, 1i longitudine; 3us subundatus, obliquus, angulum subacutum fingens; 4us subundatus, obliquus, angulum acutum fingens, 3o multò longior.

Second marginal areolet between one-half and two-thirds of the length of the first: first cross-vein slightly curved, slightly slanting, forming an acute angle, parted from the second by much more than twice its length; second very slightly curved, upright, forming a slightly obtuse angle, as long as the first; third very slightly waved, slanting, forming a slightly acute angle; fourth very slightly waved, slanting, forming an acute angle, much larger than the third; fifth very slightly curved, nearly upright, forming a slightly obtuse angle. Body tawny, somewhat ferruginous, covered with white down: head a little narrower than the fore-chest; some black marks on each side of the crown; space about the eyelets also black; face very convex, adorned in front with a broad black stripe, on each side of which there are black bands: mouth tawny with a black tip, reaching the hind-hips: eyes prominent: feelers black: scutcheon of the fore-chest adorned in front with two triangular black spots; hind-scutcheon angular and slightly notched and armed with a very short tooth on each side: scutcheon of the middle-chest adorned with five black stripes, the inner pair short but succeeded by two black dots, the outer pair broad; hind border very slightly excavated: abdomen slightly obconical, larger than the chest, adorned on the hind border of each segment with a pitchy band which is widened on each side into a triangular spot; four tubercles on the under side; opercula dull tawny; drums small, tinged with green, a little apart, not more than one-third of the length of the abdomen: legs tawny; claws black, tawny at the base; fore-thighs armed with three black teeth, one very short, two very long: wings colourless, grayish at the base; cross-veins from the first to the fourth clouded with brown; brands whitish; veins tawny; cross-veins and a few parts of the longitudinal veins black; flaps grayish at the base. Length of the body 13 lines; of the wings 41 lines.

a, b. China. Presented by G. T. Lay, Esq.

19. *DUNDUBIA RUFIVENA*, Mas.

*Nervus transversus* 1us *subcurvus*, *subobliquus*, *angulum subobtusum* *figens*, 2o *duplo ejus longitudine divisus*; 2us *subcurvus*, *obliquus*, *angulum obtusum* *figens*, 1o *multo brevior*; 3us *subcurvus*, *subobliquus*, *angulum rectum* *figens*; 4us *subcurvus*, *ferè erectus*, *angulum rectum* *figens*, 3o *brevior*.

Second marginal areolet nearly five sixths of the length of the first: first cross-vein very slightly curved, slightly slanting, forming a slightly obtuse angle, parted from the second by twice its length; second very slightly curved, slanting, forming an obtuse angle, much shorter than the first; third very slightly curved, very slightly slanting, forming a right angle; fourth slightly curved, nearly upright, forming a right angle, shorter than the third; fifth slightly curved, nearly upright, forming a nearly right angle. In the right wing of an insect of this species the fourth cross-vein is a little longer than the third; and joins the hind-vein of the third discoidal areolet before the fork of the latter. Body pale grass-green: head much narrower than the fore-chest; face very convex: mouth tawny, reaching the middle-hips: feelers tawny: eyes not prominent. fore-chest broadest near the base of the fore-wings; hind-scutcheon broad, finely furrowed, forming a very obtuse angle by the base of each fore-wing, brownish and slightly notched on each side, armed with a small tooth towards the fore border: scutcheon of the middle-chest indistinctly marked with four obconical, fawn-coloured stripes, outer pair obconical, about thrice the length of the inner pair, which are semicircular; hind border slightly excavated: abdomen obconical, much longer than the chest: opercula pale green: drums very large, pale green, narrow towards the base, much more than half the length of the abdomen: legs green; tips of shanks, feet, fore-shanks, and spines of the hind-shanks tawny; tips of the claws black; fore-thighs armed with three tawny teeth: wings whitish, grass-green at the base; veins pale fawn-colour with a reddish tinge towards the base; flaps pale green towards the base. Length of the body 13 lines; of the wings 33 lines.

*a, b.* Java. From Mr. Argent's collection.

## 20. DUNDUBIA SERVA, Mas.

*Nervus transversus* 1us subcurvus, obliquus, angulum valdè obtusum fingens, 2o sexties ejus longitudine divisus; 2us subrectus, valdè obliquus, angulum valdè obtusum fingens, 1o multo longior; 3us ferè rectus, subobliquus, angulum rectum fingens; 4us rectus, subobliquus, angulum rectum fingens, 3o longior.

Second marginal areolet full two-thirds of the length of the first: first cross-vein very slightly curved, slanting, forming a very obtuse angle, parted from the second by full six times its length; second nearly straight, very slanting, forming a very obtuse angle, very much longer than the first; third nearly straight, slightly slanting, forming a right angle; fourth straight, very slightly slanting, forming a right angle, longer than the third; fifth slightly curved, nearly upright, forming a right angle. Head wanting: body brownish-tawny: fore-chest broadest near the base of the fore-wings; scutcheon adorned with two black stripes; furrows blackish; hind-scutcheon tawny with a black hind border, widened, slightly angular and armed with a moderate sized tooth on each side: scutcheon of the middle-chest adorned with five black stripes; the side pairs oblique, the inner pair short, the outer pair much interrupted; hind border tawny, very slightly excavated: breast tawny: abdomen obconical, much longer than the chest, tawny beneath: opercula blackish; drums tawny, very large, more than half the length of the abdomen, narrow at the base, slightly overlapping towards their tips: legs tawny; fore-shanks, feet, and tips of the other shanks darker; tips of the claws black; fore-thighs armed with three black teeth, of these two are long, and one is very small: wings colourless; veins black, tawny towards the base and along the fore border. Length of the body 12 lines; of the wings 36 lines.

a. Corea. Presented by Sir E. Belcher.

## 21. DUNDUBIA FULIGINOSA, Mas.

*Nervus transversus* 1us ferè rectus, valdè obliquus, angulum valdè obtusum fingens, 2o plus triplo ejus longitudine divisus; 2us subrectus, valdè obliquus, angulum valdè obtusum fingens, 1o paullo brevior; 3us rectus, subobliquus, angulum vix acutum fingens; 4us rectus, subobliquus, angulum vix acutum fingens, 3o paullo brevior.

Second cross-vein nearly three-fourths of the length of the first: first cross-vein nearly straight, very slanting, forming a very obtuse

angle, parted from the second by more than thrice its length; second nearly straight, very slanting, forming a very obtuse angle, a little shorter than the first; third straight, slightly slanting, forming a hardly acute angle; fourth straight, slightly slanting, forming a hardly acute angle, a little shorter than the third; fifth curved, slanting, forming a nearly right angle. Body brownish tawny: head a little narrower than the fore-chest, adorned with a very irregular and interrupted black band across the crown; face very convex, rather prominent, adorned with a black spot, and in front with two black stripes and on each side with five black bands: mouth tawny with a black tip, reaching to the hind-hips: eyes very prominent: feelers black: fore-chest broadest near the base of the fore-wings; scutcheon adorned with two black stripes which do not reach the hind border: sides of the hind-scutcheon widened, angular, and notched, and in front armed with a rather large tooth: scutcheon of the middle-chest adorned with five black stripes; the inner pair shortened behind, but succeeded by two black spots; the outer pair irregular and interrupted in front; hind border very slightly excavated: abdomen slightly obconical, much longer than the chest; drums very long, dull tawny with a broad black band near the tip, two-thirds of the length of the abdomen: legs dark tawny; feet and tips of the shanks black; fore-thighs armed with rather long tawny teeth, of these two are rather long, and one very small: wings tinged with pale brown; veins black, pitchy along the fore border. Length of the body 14 lines; of the wings 36 lines.

a. Philippine Islands. From Mr. Cuming's collection.

## 22. DUNDUBIA LATERALIS, Mas et Fem.

*Nervus transversus* 1us curvus, obliquus, angulum valdè obtusum fignens, 2o quadruplò ejus longitudine divisus; 2us subundatus obliquus, angulum valdè obtusum fignens, 1o multò brevior; 3us subcurvus, subobliquus, angulum ferè rectum fignens; 4us undatus, obliquus, angulum acutum fignens, 3o multò longior.

Second marginal areolet three-fourths of the length of the first: first cross-vein curved, slanting, forming a very obtuse angle, parted from the second by four times its length; second very slightly waved, slanting, forming a very obtuse angle, much shorter than the first; third very slightly curved, slightly slanting, forming a nearly right angle; fourth waved, slanting, forming an acute angle, much longer than the third; fifth curved, nearly upright, forming a hardly acute



angle. Body tawny: head narrower than the fore-chest; crown adorned with four large black marks, the middle pair triangular, connected at the base; face prominent, adorned above with a triangular black mark, and on each side in front with black bands: eyes prominent: mouth tawny with a black tip: feelers black: fore-chest adorned with six black stripes; the middle pair slightly converge and then diverge, and include an elliptic space; the other four are oblique; each side forming a very obtuse angle at the base of the fore-wing, armed with a stout tooth near the fore border; hind-scutcheon rather narrow in the middle, broader on each side: a black stripe on the scutcheon of the middle-chest extends from the fore border along two-thirds of the length; on each side of this a black slightly oblique stripe extends from the fore border to half the length of the middle stripe, and is succeeded by a black dot; more outward there is a very small black streak, and still nearer the border a long black much excavated and slightly slanting stripe appears; excavation on the hind border extremely slight: abdomen almost linear till near the tip, where it is obconical, very much longer than the chest, adorned with an interrupted black stripe in the middle, and with a row of black spots on each side; disks of the segments mostly pitchy: opercula tawny, rather small; tymbals pale green; drums pale tawny, very large, much more than half the length of the abdomen, green towards the tips which are pitchy, broadest in the middle part, slightly concave on the outer side, very convex on the inner side; legs tawny; tips of the claws black; middle and hind-thighs and shanks tinged with green; fore-thighs armed with two oblique teeth: wings colourless, pale brown at the base; veins and fore borders green; veins black towards the tips, and adorned with broad black bands on the fore-wings, whose cross-veins are also black; first and second cross-veins clouded with brown.

*Fem.*—Abdomen obconical, a little narrower than the chest, very tapering and slender towards the tip, adorned with some pitchy marks along the back and on each side, and with some black marks towards the tip: oviduct black.

Length of the body 13—14 lines; of the wings 40—42 lines.

*α, b.* Silhet. From the Rev. J. Stainforth's collection.

## 23. DUNDUBIA NIGRIMACULA, Mas.

*Nervus transversus* 1us curvus, obliquus, angulum valdè obtusum fingens, 2o plus duplò ejus longitudine divisus; 2us vix undatus, valdè obliquus, angulum perobtusum fingens, 1o multò brevior; 3us vix undatus, valdè obliquus, angulum ferè rectum fingens; 4us ferè rectus, subobliquus, angulum vix acutum fingens, 3o paultò brevior.

Second marginal areolet three-fourths of the length of the first: first cross-vein curved, slanting, forming a very obtuse angle, parted from the second by much more than twice its length; second hardly waved, very slanting, forming an extremely obtuse angle, much shorter than the first; third hardly waved, slightly slanting, forming a nearly right angle; fourth almost straight, slightly slanting, forming a hardly acute angle, a little shorter than the third; fifth curved, nearly upright, forming a very slightly acute angle. Body tawny, linear: head narrower than the fore-chest; face very convex: eyes prominent: mouth tawny with a pitchy tip: feelers tawny: fore-chest a little broader than long, somewhat narrower in front than behind; sides rounded at the base of the fore-wings, thence very slightly concave, armed with a small tooth near the fore border; hind-scutcheon green, broad, slightly furrowed: excavation on the hind border of the scutcheon of the middle-chest extremely slight: abdomen slightly obconical, longer than the chest, ferruginous and adorned with a row of pitchy spots on each side, tinged with green on each side beneath: opercula close, rather small: drums very large, green, long and narrow, three-fourths of the length of the abdomen: legs tawny; tips of the claws black: fore-thighs armed with two tawny teeth: wings and flaps of the hind-wings colourless, tawny at the base and along the fore borders; an almost imperceptible tawny tinge on the tips of the fore-wings; veins tawny, black towards the tips. Length of the body 17 lines; of the wings 46 lines.

a, b. Java. From Mr. Argent's collection.

## 24. DUNDUBIA SOBRIA, Fem.

*Nervus transversus* 1us subcurvus obliquus, angulum valdè obtusum fingens, 2o ferè triplò ejus longitudine divisus; 2us subcurvus, subobliquus, angulum obtusum fingens, 1o multò brevior; 3us subcurvus, obliquus, angulum acutum fingens; 4us rectus, subobliquus, angulum subacutum fingens, 3o vix longior.

Second marginal areolet three-fourths of the length of the first: first cross-vein very slightly curved, slanting, forming a very obtuse

angle, parted from the second by nearly thrice its length; second slightly curved, slightly slanting, forming an obtuse angle, very much shorter than the first; third very slightly curved, slanting, forming an acute angle; fourth straight, slightly slanting, forming a slightly acute angle, very little longer than the third; fifth curved, upright, forming a nearly right angle. Body tawny: head narrower than the fore-chest; face prominent: mouth pitchy, its tip black: eyes prominent: feelers tawny: fore-chest a little narrower in front than behind; its sides rounded or almost obtusely angular at the base of the fore-wings, straight from thence as far as the fore border, where each is armed with a very small tooth; hind-scutcheon pale tawny: excavation on the hind border of the scutcheon of the middle-chest very shallow: abdomen obconical, very hairy towards the tip, a little longer than the chest: legs tawny; tips of the claws black; fore-thighs armed with two tawny teeth, one oblique, the other nearly upright: wings slightly tinged with tawny; veins green, black at the tips; fore borders brown; flaps pale brown with a black vein on the fore border; flaps of the hind-wings colourless, pale brown at the base. Length of the body 15 lines; of the wings 44 lines.

*a.* Hong Kong. Presented by J. C. Bowring, Esq.

#### 25. DUNDUBIA VIRESCENS.

*Cicada virescens*, *Oliv. Enc. Méth.* v. 747, 5. pl. 110, f. 2. *Stoll, Cic.* 38, pl. 7, f. 35.

#### 26. DUNDUBIA FUSCA.

*Cicada fusca*, *Oliv. Enc. Méth.* v. 749, pl. 111, f. 3. *Stoll, Cic.* 39, pl. 7, f. 36.

#### 27. DUNDUBIA URANIA, Mas.

*Nervus transversus 1us curvus, obliquus, angulum obtusum fingens, 2o ferè triplò ejus longitudine divisus; 2us subcurvus, obliquus, angulum valdè obtusum fingens, 1i longitudine; 3us subcurvus obliquus, angulum acutum fingens; 4us subcurvus, subobliquus, angulum vix acutum fingens, 3o paullo brevior.*

Second marginal-areolet much more than three-fourths of the length of the first: first cross-vein curved, slanting, forming an obtuse angle, parted from the second by near thrice its length; second slightly curved, slanting, forming a very obtuse angle, as long as the first; third very slightly curved, slanting, forming an acute angle; fourth very slightly curved, slightly slanting, forming a hardly

acute angle, a little shorter than the third; fifth straight, nearly upright, forming an obtuse angle. Body rather long, somewhat spindle-shaped, ferruginous, partly covered with hoary bloom: head and scutcheon of the fore-chest tinged with green: head narrower than the fore-chest; face very convex, rather prominent: mouth tawny with a black tip, extending some distance beyond the hind borders of the drums: feelers tawny, very slender except at the base: fore-chest a little narrower in front than behind; hind-scutcheon bright green, partly ferruginous along the fore border, rounded and somewhat widened at the base of the fore-wing, slightly angular, but not toothed on each side: scutcheon of the middle-chest green on each side and at the tip; cross-ridge pale tawny; excavation on the hind border very slight: abdomen slightly obconical, very much longer than the chest, green and powdered with white beneath, adorned at the base with a short snow-white band, which forms two triangles: opercula pale tawny, close, of moderate size; drums green, of moderate size, slightly overlapping, full one-fourth of the length of the abdomen: legs tawny, tinged with green; fore-thighs armed with three tawny teeth, two large, one very small; claws black, tawny at the base: wings colourless; fore-wings slightly tinged with tawny towards the tips; a row of pale brown spots along the tips of the longitudinal veins of the submarginal areolets; first and second cross-veins clouded with brown, traces of which are visible on the other cross-veins; fore border green as far as the brand, dark tawny from thence towards the tip; veins green, adorned with black bands across the breadth beneath the brand, wholly black towards the tips; primitive areolet, fore-membrane, flaps at the base and for a space along the hind border tawny. Length of the body 16 lines; of the wings 41 lines.

a. East India. From Archdeacon Clerk's collection.

## 28. DUNDUBIA PSECCAS, Fcm.

*Nervus transversus* 1us valdè curvus, subobliquus, angulum acutum fingens, 2o plus quam ejus longitudine divisus; 2us valdè curvus, obliquus, angulum subobtusum fingens, 1i longitudine; 3us curvus, obliquus, angulum acutum fingens, 4us subcurvus, obliquus, angulum acutum fingens, 3o paullo longior.

Second marginal areolet five-sixths of the length of the first; first cross-vein very much curved, slightly slanting, forming an acute angle, parted from the second by much more than its length; second much curved, slanting, forming a slightly obtuse angle, as long as the first; third curved, slanting, forming an acute angle; fourth slightly curved, slanting, forming an acute angle, very little

longer than the third; fifth very slightly curved, slightly slanting, forming an obtuse angle. Body tawny: head much narrower than the fore-chest; crown adorned with some black marks about the eyelets and with two tawny marks on each side; face very convex; mouth tawny with a black tip, reaching a little beyond the hind-hips: eyes rather prominent: feelers tawny: scutcheon of the fore-chest adorned with two black stripes, which are widened into triangles in front and behind; fore border partly blackish; sides ferruginous with pitchy borders; hind-scutcheon rather narrow in the middle, much widened at the base of each fore-wing, much excavated on each side: scutcheon of the middle-chest adorned with four ferruginous stripes; a large tawny spot on each of the inner pair which are succeeded by two ferruginous spots; outer pair much longer than the inner pair, much excavated, their tips widened to each side; hind border slightly excavated: abdomen obconical, as long as the chest, adorned near the base with interrupted pitchy bands on the hind borders of the segments: oviduct ferruginous: legs tawny; a pitchy band near the tip of each shank; fore-thighs adorned with some pitchy marks, armed with three tawny teeth, one oblique and of moderate size, the second and third small: wings colourless; fore border and veins tawny, the latter with some pitchy bands, which are chiefly on the forks: cross-veins clouded with brown; a row of oval brown spots on the tips of the longitudinal veins of the marginal areolets. Length of the body 11 lines; of the wings 36 lines.

α. Java. From Mr. Argent's collection.

## 29. DUNDUBIA CLONIA, Mas.

*Nervus transversus lvs curvus, obliquus, angulum subobtusum fingens, 2o plus duplò ejus longitudine divisis; 2us valdè curvus, obliquus, angulum subobtusum fingens, 1o vix brevior; 3us subundatus, obliquus, angulum acutum fingens; 4us vix undatus, obliquus, angulum acutum fingens, 3o paullò brevior.*

Second marginal areolet four-fifths of the length of the first: first cross-vein curved, slanting, forming a slightly obtuse angle, parted from the second by more than twice its length; second much curved, slanting, forming a very slightly obtuse angle, nearly as long as the first; third very slightly waved, slanting, forming an acute angle; fourth hardly waved, slanting, forming an acute angle, a little shorter than the third; fifth straight, slanting, forming an obtuse angle. Body tawny, tinged with green, spindle-shaped: head a little narrower than the fore-chest, adorned with a curved-shaped

pitchy spot which incloses the eyelets, and on each side with two larger ferruginous spots; face convex, not prominent, ferruginous above with the exception of a tawny triangular spot on the hind border; mouth tawny with a pitchy tip extending to the hind border of the drums: eyes very prominent: feelers black: fore-chest narrower before than behind; scutcheon adorned with four pitchy stripes: the middle pair widened on the fore border, slightly converging thence for two-thirds of the length, then diverging and curved and including a spindle-shaped tawny spot; furrows and sides mostly pitchy; hind-scutcheon mostly green, narrow in the middle, rounded much widened and adorned with two large pitchy spots above the base of each fore-wing, slightly excavated and armed with a very small tooth on each side: scutcheon of the middle-chest adorned with five pitchy stripes and with two pitchy spots; the middle stripe longer than the inner pair, which are slightly oblique; outer pair apparently obliterated with the exception of their hinder part; hind border very slightly excavated, with a pitchy streak on each side: abdomen slightly obconical, rather less than twice the length of the chest, adorned with a pitchy spot on each side of every segment from the base to the tip which is pitchy: opercula extremely small, not covering the tymbals which are white with brown bands and spots; drums very small, pale green, slightly overlapping: legs tawny; thighs tinged with green, claws black, tawny at the base: fore-thighs armed with three tawny teeth, two of moderate size, one very small: wings narrow, colourless, adorned with opaline lustre: fore border tawny with the exception of a brown band adjoining the brand which is tawny; veins tawny, adorned with black bands, partly ferruginous in the disk, black at the tips; first and second cross-veins clouded with brown; a row of brown spots on the tips of the longitudinal veins of the marginal areolets; primitive areolet pale tawny; fore-flaps dark tawny; hind-flaps dark tawny at the base, and for a short space along the hind border. Length of the body 18 lines: of the wings 42 lines.

a. Ceylon.

### 30. DUNDURIA NICOMACHE, Mas.

*Nerrus transversus* 1us *curvus*, *subobliquus*, *angulum obtusum fingens*, 2o *quadruplò ejus longitudine divisus*; 2us *subcurvus*, *subobliquus*, *angulum obtusum fingens*, 1o *pauillò brevior*; 3us *subundatus*, *obliquus*, *angulum rix acutum fingens*; 4us *undatus* *angulum acutum fingens*, 3o *longior et obliquior*.

Second marginal areolet two-thirds of the length of the first; first cross-vein curved, very slightly slanting, forming an obtuse an-

gle, parted from the second by four times its length; second very slightly curved, very slightly slanting, forming an obtuse angle, a little shorter than the first; third very slightly waved, slanting, forming a hardly acute angle; fourth waved, forming an acute angle, longer and more slanting than the third; fifth curved, upright, forming a very slightly acute angle. Body black, nearly linear, tawny beneath: head a little narrower than the fore-chest, adorned with two zigzag tawny marks behind the eyelets, and with a long angular tawny stripe on each side between the eyes; face very convex, rather prominent, adorned with a short tawny stripe, and on each side with tawny bands along the whole length: mouth tawny with a black tip, reaching beyond the hind-hips: eyes prominent: feelers black: fore-chest a little narrower in front than behind; scutcheon adorned with a tawny side-stripe, and elsewhere mostly occupied by four large, oblique, tawny spots; the inner pair are much larger than the outer pair, and each contains a sickle-shaped, pitchy spot: hind-scutcheon tawny, narrow in the middle, rounded, much widened and adorned with three large, pitchy spots near the base of each fore-wing, slightly excavated and armed with a tooth on each side: disk of the scutcheon of the middle-chest adorned on each side with three or four irregular tawny streaks, which vary in length and in breadth; sides, cross-ridge and hind border tawny, the latter rather deeply excavated: abdomen pitchy, slightly obconical, much longer than the chest; hind borders of the segments tawny; underside tawny, pitchy at the tip: opercula tawny, close; drums tawny, obconical, very large, a little apart, more than two-thirds of the length of the abdomen: legs tawny; feet ferruginous; claws black, ferruginous towards the base; fore-thighs armed with three tawny teeth, two of moderate size, the third very small: wings colourless, long, narrow; fore border tawny; veins tawny, adorned with black bands across the disk beneath the brand, black towards the tips, marked with black at the base; fore-flaps pale tawny with a brownish tinge, which colour also occurs on the hind-flaps, at the base, and for a short space along the hind border. Length of the body  $10\frac{1}{2}$  lines; of the wings 34 lines.

a. North India. From Mr. Warwick's collection.

## 31. DUNDUBIA TIGRINA, Mas.

*Nervus transversus* 1us rectus, valdè obliquus, angulum subacutum fingens, 2o sexties ejus longitudine divisus; 2us subundatus, obliquus, angulum perobtusum fingens, 1o duplò longior; 3us undatus, valdè obliquus, angulum acutum fingens; 4us rix curvus, valdè obliquus, angulum acutum fingens, 3o multò brevior.

Second marginal areolet about two-thirds of the length of the first: first cross-vein straight, very slanting, forming a slightly acute angle, parted from the second by full six times its length; second very slightly waved, slanting, forming an extremely obtuse angle, full twice the length of the first; third waved, very slanting, forming an acute angle; fourth hardly curved, very slanting, forming an acute angle, much shorter than the third; fifth nearly straight, almost upright, forming a slightly obtuse angle. Body tawny, nearly linear, clothed with pale silky down: head narrower than the fore-chest, with a slight ferruginous tinge above; crown adorned with four black stripes, middle pair close together, partly united between the eyelets; side pair nearly round on proceeding from the base of the feelers, thence narrower and slightly curved; face convex, not prominent, adorned with a black band on each side: mouth tawny with a black tip, extending a little beyond the hind-hips: eyes prominent: feelers black: fore-chest narrower before than behind; scutcheon adorned with four black stripes, the middle pair slightly converging from the fore border to the hind border, the outer pair more oblique; hind-scutcheon very narrow in the middle, adorned with a black spot and very much widened above the base of each fore-wing, slightly excavated and armed with a short tooth on each side: scutcheon of the middle-chest adorned with five slender black stripes; middle one entire, inner pair much interrupted, outer pair slightly interrupted; hind border very slightly excavated: abdomen slightly obconical, ferruginous above, much longer than the chest; hind borders of the segments pitchy; under side tawny, pitchy at the base and at the tip: opercula tawny, close; drums black, small, far apart, the outer border tawny: legs tawny; thighs striped with black; tips of the shanks pitchy; claws black, ferruginous at the base; fore-feet and middle-feet black; hind-feet ferruginous; fore-thighs armed with three black teeth, two long, one small: wings colourless, long, narrow; fore border bright ferruginous as far as the brand, pitchy from thence to the tip; veins black, ferruginous towards the base; first and second cross-veins clouded with brown; a row of brown spots along the tips of the veins of the marginal arcolets, the spots with the exception of the first and the



second are very indistinct; fore-flaps gray; hind-flaps gray at the base and for a space along the hind border. Length of the body 11 lines; of the wings 33 lines.

a. Malabar. From Mr. Walker's collection.

### 32. DUNDUBIA MACULIPES, Mas.

*Nervus transversus* 1us ferè rectus, subobliquus, angulum subobtusum fingens, 2o plus duplò ejus longitudine divisus; 2us ferè rectus, erectus, angulum subobtusum fingens, 1i longitudine; 3us ferè rectus, obliquus, angulum subacutum fingens; 4us subcurvus, obliquus, angulum ferè rectum fingens, 3o brevior.

Second marginal areolet much more than two-thirds of the length of the first: first cross-vein very nearly straight, very slightly slanting, forming a slightly obtuse angle, parted from the second by much more than twice its length; second very nearly straight, upright, forming a slightly obtuse angle, as long as the first; third almost straight, slanting, forming a slightly acute angle; fourth very slightly curved, slanting, forming a slightly acute angle, shorter than the third; fifth curved, upright, forming a right angle. Body tawny, covered with whitish down: head much narrower than the fore-chest; two interrupted black bands across the crown; face very convex; its furrows in front black: mouth pale tawny with a black tip, reaching far beyond the hind-lips: eyes prominent: fore-chest widest near the hind border; scutcheon adorned with two black stripes, its sides and the furrows also blackish: hind-scutcheon having on each side a very obtuse angle near the base of the fore-wing, and thence forming a waved line which is first concave and then convex: scutcheon of the middle-chest adorned with two U-shaped black marks; a black dot behind each of these, and on each side a black oblique stripe; excavation on the hind border broad but shallow: abdomen nearly elliptical, much longer than the chest, adorned with four rows of black spots, two in the middle and one on each side; hind borders of the segments and tip partly black: opercula small, blackish; tymbals white; drums large, pale tawny, slightly overlapping, rather less than half the length of the abdomen: legs pale tawny, having a pitchy band near the tip of each thigh and shank, the latter has also a pitchy band near the base; feet tawny, pitchy at the base, black towards the tips; fore-thighs streaked with black, and armed with one black, and one tawny tooth: wings colourless, pale tawny, and marked with black at the base, green along the fore border; veins green, black towards the tips; cross-veins black, strongly marked, clouded with brown from the first to the fourth; a

row of small brown spots near the tips of the longitudinal veins of the submarginal areolets; flaps of the hind-wings pale brownish tawny towards the base and along the fore border. Length of the body 12 lines; of the wings 34 lines.

*a.* North Bengal. From Miss Campbell's collection.

### 33. DUNDUBIA CARMENTE, Mas.

*Nervus transversus* 1us ferè rectus, obliquus, angulum acutum fingens, 2o quadruplò ejus longitudine divisus; 2us rectus, ferè erectus, angulum obtusum fingens, 1o vix longior; 3us ferè rectus, obliquus, angulum subacutum fingens; 4us rectus, obliquus, angulum rectum fingens, 3o multò brevior.

Second marginal areolet a little more than half the length of the first: first cross-vein nearly straight, slanting, forming an acute angle, parted from the second by full four times its length: second straight, nearly upright, forming an obtuse angle, hardly longer than the first; third nearly straight, slanting, forming a very slightly acute angle; fourth straight, slanting, forming a right angle, much shorter than the third; fifth straight, upright, forming a slightly obtuse angle. Body tawny, rather narrow, partly covered with pale shining down: head a little narrower than the fore-chest; crown adorned with a large black spot which sends forth branches on each side; face convex, adorned with two black stripes which are interrupted in front: mouth tawny with a black tip, reaching beyond the hind-hips: eyes prominent: feelers black: scutcheon of the fore-chest adorned with two black stripes which are slightly waved; on each side of these are two short curved pitchy stripes, and beyond the latter two black oblique stripes occupy the furrows; sides black; hind-scutcheon adorned with two pitchy spots, narrow in the middle, rounded and much widened at the base of the fore-wing, excavated on each side: scutcheon of the middle-chest adorned with five black stripes; middle one slender; the other four rather broader and slightly oblique, the inner pair shorter than the outer pair, near whose tips are four black dots; hind border very slightly excavated: abdomen obconical, longer than the chest, adorned with a double row of slender black marks on the hind borders of the segments; under side paler, adorned with four black spots, pitchy at the tip: opercula tawny, rather large; their disks mostly pitchy; drums pitchy, rather large, tawny along the outer side, very narrow towards the tips, nearly half the length of the abdomen: legs tawny, tips of the claws black; fore-hips and fore-thighs adorned with pitchy streaks; fore-thighs armed with four teeth, one tawny near the base,

the other three black, two large and one small; fore-shanks ferruginous: wings colourless; their tips slightly tinged with brown; fore border tawny as far as the brand, black from thence towards the tip; veins black, tawny at the base; hind-flaps at the base and fore-flaps brown. Length of the body 9 lines; of the wings 30 lines.

a. Java. From Mr. Argent's collection.

### 34. DUNDUBIA THALIA, Mas.

*Nervus transversus* 1us *curvus*, *obliquus*, *angulum obtusum* *figens*, 2o *plus duplò ejus longitudine divisus*; 2us *vix curvus*, *obliquus*, *angulum obtusum* *figens*, 1o *dimidio paulò longior*; 3us *subcurvus*, *obliquus*, *angulum vix acutum* *figens*; 4us *subcurvus*, *obliquus*, *angulum subacutum* *figens*, 3o *paulò brevior*.

Second marginal areolet less than half the length of the first: first cross-vein curved, oblique, forming an obtuse angle, parted from the second by very much more than twice its length; second hardly curved, oblique, forming an obtuse angle, very little more than half the length of the first; third very slightly curved, oblique, forming a hardly acute angle; fourth slightly curved, oblique, forming a slightly acute angle, a little shorter than the third; fifth nearly straight, almost upright, forming a very slightly obtuse angle.

*Var?* First cross-vein slightly slanting; second slightly curved, upright, forming a slightly obtuse angle, a little longer than the first; third slightly waved, forming an acute angle; fourth very slightly curved, forming an acute angle; fifth slightly curved. Body tawny, narrow, linear: head a little narrower than the fore-chest, adorned above with three large black spots, one on the region of the eyelets; face prominent, very convex, adorned in front with a black stripe, which sends forth black bands on each side: mouth pale tawny with a black tip, reaching the middle-hips: eyes prominent: feelers tawny at the base: fore-chest narrower before than behind; scutcheon adorned with two black stripes which are widened before and behind, and with two pitchy marks nearer the sides which are mostly pitchy; hind-scutcheon narrow in the middle, pitchy, very broad, and forming an obtuse angle near the base of each fore-wing, pitchy along the fore border, armed with a tooth in the middle of each side: disk of the scutcheon of the middle-chest black, adorned with two tawny stripes, which are divided in front and the outer fork of each forms three branches; sides and hind border tawny, the latter hardly excavated: abdomen pale tawny, slightly obconical, a little narrower and much longer than the chest, adorned on each side

with a very broad pitchy band, which from the second segment to the tip occupies the whole surface; a pitchy spot on each side of the second and of the following segments: opercula pale tawny, partly pitchy, not near covering the tymbals, which are whitish with pale tawny bands; drums whitish, large, near together, narrower towards the tips, less than half the length of the abdomen: legs pale tawny; claws black towards the tips; fore-thighs not much thickened, armed with three tawny teeth, two of which are of moderate size, and one very small: wings with a very indistinct tawny tinge, whitish at the base and on the fore-flaps, and on the hinder base of the flaps; fore border pale tawny as far as the brand, darker from thence to the tip; veins tawny, very pale at the base, black at the tips; first and second cross-veins clouded with brown; a row of indistinct pale brown spots along the tips of the longitudinal veins of the marginal areolets. Length of the body 8 lines; of the wings 30 lines.

### 35. DUNDUBIA CLIO, Mrs.

*Nervus transversus* *lus subcurvus erectus angulum subobtusum fingens*, 2o *plus duplò ejus longitudine divisus*; 2us *subcurvus, ferè erectus, angulum subobtusum fingens*, 1o *multò longior*; 3us *vix undatus, obliquus, angulum ferè rectum fingens*; 4us *vix undatus, obliquus, angulum vix obtusum fingens*, 3o *multò longior*.

Second marginal areolet half the length of the first: first cross-vein very slightly curved, upright, forming a slightly obtuse angle, parted from the second by much more than twice its length; second slightly curved, nearly upright, forming a slightly obtuse angle, much longer than the first; third hardly waved, slanting, forming a nearly right angle; fourth hardly waved, slanting, forming a hardly obtuse angle, much longer than the third; fifth hardly curved, upright, forming a nearly right angle. Body narrow, linear, partly covered with shining whitish down: head and chest green, tinged with tawny: head a little narrower than the fore-chest; a broad and very irregular black band across the crown; face very convex, rather prominent, adorned in front with two black stripes which send forth black bands on each side: mouth pale green with a black tip, reaching the middle-hips: eyes prominent: feelers black: scutcheon of the fore-chest adorned with two black stripes whose outer sides are very irregular; sides and furrows blackish; hind-scutcheon much widened on each side, convex at the base of the fore-wing, between which and the fore border it is very slightly excavated: scutcheon of the middle-chest adorned with five black stripes, the middle one

is widened towards the hind border into a diamond-shaped spot which has a black dot on each side; inner pair slender, short, slightly oblique; outer pair excavated on the inner side in front, forming a right angle on the outer side at the tips; hind border slightly excavated: abdomen ferruginous, almost linear from the base to the tip, much longer than the chest, adorned with a broad black interrupted band on each segment, and on each side with a broad pale tawny stripe which extends along half the length from the base; hind borders of the segments green; under side tawny with a pitchy tip: opercula very small, pale tawny with pitchy borders, partly covering the tymbals, which are whitish with tawny bands: legs green, tinged with tawny; a pitchy mark on each hip and on the tip of each middle-thigh and hind-thigh, and at the base of each hind-shank, and both at the base and at the tip of each fore-thigh and fore-shank and middle-shank; feet black: wings colourless; primitive areolet, fore-membrane and the base of the flap pale buff: veins black, mostly tawny towards the base; brands black, yellow towards the base; fore border green, ferruginous beyond the brand; cross-veins from the first to the fourth slightly clouded with brown; a row of little brown spots on the tips of the longitudinal veins of the sub-marginal areolets; flaps hardly tinged with brown along the fore border. Length of the body 9 lines; of the wings 26 lines.

*a, b.* ———?

### 36. DUNDURIA DIMINUTA, Mas.

*Nervus transversus* 1us *subcurvus*, *ferè erectus*, *angulum vix obtusum* *figens*, 2o *ferè quadruplò ejus longitudine divisus*; 2us *ferè rectus*, *obliquus*, *angulum valdè obtusum* *figens*, 1i *longitudine*; 3us *subundatus*, *subobliquus*, *angulum rectum* *figens*; 4us *subundatus*, *subobliquus*, *angulum subacutum* *figens*, 3i *longitudine*.

Second marginal areolet much more than half the length of the first: first cross-vein slightly curved, nearly upright, forming a hardly obtuse angle, parted from the second by nearly four times its length; second nearly straight, slanting, forming a very obtuse angle, as long as the first: third slightly waved, slightly slanting, forming a right angle, joining the second discoidal areolet; fourth very slightly waved, slightly slanting, forming a slightly acute angle, joining the base of the sixth marginal areolet, as long as the third; fifth very slightly curved, upright, forming a right angle. Body tawny, narrow, nearly linear, partly covered with pale shining down: head a little narrower than the fore-chest; crown adorned with three black stripes, the middle one broad, and including the

eyelets; face very convex, adorned in front with a black stripe, which sends forth black bands on each side: eyes prominent: mouth tawny with a black tip, nearly reaching the hind-hips: feelers tawny at the base: fore-chest narrower in front; scutcheon adorned with a black stripe which is widened in front and behind, includes a tawny stripe, and has a curved pitchy mark on each side; hind-scutcheon narrow above, angular and much widened on each side: middle-chest adorned with four brown stripes; the outer pair are very large and occupy each side, the inner pair are very short, and between them there is a brown stripe which has a brown spot on each side; hind border very slightly excavated: abdomen adorned with a broad brown stripe, and on each side with a row of brown spots, much longer than the chest, tapering from the base to the tip which is pitchy: drums pale tawny, more than one-third of the length of the abdomen, not meeting beneath, narrower towards their tips: legs tawny; fore-thighs armed with two rather small teeth; wings colourless; fore border tawny as far as the brand, pitchy from thence towards the tip; veins black, tawny towards the base; first and second cross-veins clouded with brown; a brown spot on the tip of each longitudinal vein between the first and the fourth marginal areolets; hind-flaps at the base and fore-flaps gray. Length of the body 9 lines; of the wings 25 lines.

### 37. DUNDUBIA LABYRINTHICA, Mas.

*Nereus transversus* 1us subcurvus, subobliquus, angulum subobtusum fingens, 2o quadruplò ejus longitudine divisus; 2us subcurvus, subobliquus, angulum obtusum fingens, 1o paultò longior; 3us subcurvus, obliquus, angulum subacutum fingens; 4us ferè rectus, obliquus, angulum subacutum fingens, 3o multò brevior.

Second marginal areolet full two-thirds of the length of the first: first cross-vein very slightly curved, very slightly slanting, forming a slightly obtuse angle, parted from the second by full four times its length; second very slightly curved, slightly slanting, forming an obtuse angle, a little longer than the first; third slightly curved, slanting, forming a slightly acute angle; fourth almost straight, slanting, forming a slightly acute angle, much shorter than the third; fifth curved, upright, forming a nearly right angle. Body tawny: head of moderate size, a little narrower than the fore-chest, adorned with a broad, irregular, slightly curved black band which includes two tawny spots, and indicates two branches to the hind border; face pale green, prominent, very convex, adorned with

two broad black stripes; epistoma partly black; mouth tawny with a black tip, reaching the middle-hips: eyes prominent: feelers black: fore-chest with a black dot near the middle of the hind border of the scutcheon; furrows blackish; hind-scutcheon slightly rounded and adorned with a black spot near the base of each fore-wing, armed with a stout tooth on the middle of each side: scutcheon of the middle-chest adorned with four obconical black stripes, the outer pair with tawny net-work, of which there are some traces in the middle pair; the latter are much shorter than the former, and are succeeded by two large black spots: abdomen obconical, much longer than the chest, adorned above with three rows of black marks, and on the last segment with two short black stripes; a short black stripe on the under side: oviduct black: legs tawny; hips spotted with black; thighs striped with black; tips of the claws and fore-feet black; fore-thighs armed with three long black teeth: wings colourless, green along the fore border: veins green, black at the tips and on the hind borders of the fore-wings; fore borders of the hind-flaps tinged with brown. Length of the body  $8\frac{1}{2}$  lines; of the wings 23 lines.

a. New Holland. Presented by the Haslar Hospital.

### 38. DUNDUBIA MELPOMENE, Feml.

*Nervus transversus* 1us subcurvus, subobliquus, angulum obtusum fingens, 2o triplò ejus longitudine divisus; 2us subcurvus, obliquus, angulum valdè obtusum fingens, 1i longitudine; 3us subundatus, obliquus, angulum subacutum fingens; 4us vix undatus subobliquus, angulum vix acutum fingens, 3i longitudine.

Second marginal areolet more than two-thirds of the length of the first: first cross-vein very slightly curved, very slightly slanting, forming an obtuse angle, parted from the second by thrice its length; second slightly curved, slanting, forming a very obtuse angle, as long as the first; third very slightly waved, slanting, forming a very slightly acute angle; fourth hardly waved, slightly slanting, forming a hardly acute angle, as long as the third; fifth curved, nearly upright, forming an almost right angle. Body tawny: head narrower than the fore-chest; crown adorned with three united black spots, each of which surrounds one of the eyelets: face prominent, very convex, adorned in front with two slender black stripes; some of the furrows blackish: mouth tawny with a black tip, reaching the hind hips: eyes prominent: feelers black, tawny towards the base: fore-chest narrower before than behind: scutcheon adorned

with two black slender stripes which slightly converge, but cease at some distance from the hind border, where they are succeeded by two black dots; furrows and side borders pitchy; hind-scutcheon pale tawny, widened, rounded, and adorned with a black spot at the base of each fore-wing, armed with a tooth on each side: scutcheon of the middle-chest dark tawny, adorned with five slender black stripes; the inner pair proceeding from the fore border, slightly oblique, shorter and broader than the middle one; the outer pair at some distance from the fore border, slightly curved above; near each of them on the fore border are two black dots, and there are two black dots near the cross-ridge; hind border slightly excavated: abdomen obconical, longer than the chest, ferruginous above, tawny at the base, armed with a rather long horn which is pitchy towards the tip: legs pale tawny; claws black towards the tips; fore-thighs armed with three teeth, first and second rather large, first pale tawny, second black, third black and small; fore-feet and tips of the fore-shanks pitchy: wings slightly tinged with tawny: fore border bright tawny as far as the brand, dark tawny from thence to the tips; veins tawny, black towards the tips; fore-flaps tawny; hind-flaps tawny at the base and for a space along the hind border. Length of the body 15 lines; of the wings 42 lines.

a. Philippine Islands.

### 39. DUNDUBIA SAMIA, Mas.

*Nervus transversus* 1us curvus, erectus, angulum ferè rectum fingens, 2o ferè duplò ejus longitudine divisus; 2us curvus, erectus, angulum subobtusum fingens, 1o paullo longior; 3us subcurvus, obliquus, angulum subacutum fingens; 4us subcurvus, obliquus, angulum ferè rectum fingens, 3o brevior.

Second marginal areolet full two-thirds of the length of the first: first cross-vein curved, upright, forming a nearly right angle, parted from the second by nearly twice its length; second curved, upright, forming a very slightly obtuse angle, a little longer than the first; third slightly curved, slanting, forming a very slightly acute angle; fourth very slightly curved, slanting, forming a nearly right angle, shorter than the third; fifth straight, upright, forming a right angle. Body green, tinged here and there with tawny: head much narrower than the fore-chest, pitchy about the eyelets, and with a pitchy streak on each side along the eye: mouth tawny with a black tip reaching beyond the hind-hips: eyes prominent: feelers tawny: scutcheon of the fore-chest adorned with a pale streak which is slightly widened in front and behind; a pitchy spot on each side; hind-scutcheon narrow in the middle, slightly



angular and much widened at the base of each fore-wing, slightly excavated on each side: scutcheon of the middle-chest ferruginous, adorned with some green marks, of these there is a large angular spot in the middle, on each side a forked mark, behind which there is a curved mark, and nearer each side a slight streak; hind border slightly excavated: abdomen obconical, tawny, darker at the tip, longer than the chest, paler beneath: opercula tawny, small; drums pale green, small, far apart: legs tawny; tips of the claws black; fore-thighs armed with three teeth, two of moderate size, one very small: wings colourless; fore border green, tawny beyond the band; veins green, adorned with a few black bands, tawny towards the tips; cross-veins clouded with pale brown: a row of pale brown spots near the tips of the longitudinal veins of the marginal areolets; fore-flaps brown; hind-flaps brown between the middle-veins and the fore border. Length of the body 13 lines: of the wings 34 lines.

a. North India. From Mr. Warwick's collection.

#### 40. DUNDUBIA QUADRITUBERCOLATA.

*Cicada quadrितuberculata*, Signoret, *Ann. Soc. Ent. Fr. 2me Série*, v. 297.

#### 41. DUNDUBIA TUBEROSA.

*Cicada tuberosa*, Signoret, *Ann. Soc. Ent. Fr. 2me Série*, v. 299.

### Genus 11. FIDICINA.

*Fidicina*, Amyot et Serv. *Hist. Nat. Hém.* 472, 373.

#### 1. FIDICINA ANGULARIS.

*Cicada angularis*, Germ. *Silb. Rev. Ent.* ii. 68, 31.

*Nervus transversus* 1us ferè rectus, perobliquus, angulum perobtusum fignens, 2o ferè duplò ejus longitudine divisus; 2us subcurvus, obliquus, angulum valdè obtusum fignens, 1o brevior; 3us undatus, obliquus, angulum acutum fignens; 4us subundatus, obliquus, angulum acutum fignens, 3o longior.

Second marginal areolet nearly as long as the first: first cross-vein nearly straight, extremely slanting, forming an extremely obtuse angle, parted from the second by a little less than twice its length; second very slightly curved, slanting, forming a very obtuse angle, shorter than the first; third waved, slanting, forming a slightly acute angle; fourth slightly waved, slanting, forming an acute angle, longer than the third; fifth curved, nearly upright.

forming a slightly acute angle. Body black, dark ferruginous beneath; head as broad as the fore-chest, adorned with a tawny stripe which is interrupted and forms three parts of a circle in the middle; just behind it and adjoining the eyes are two large tawny spots; face conical, prominent, deep ferruginous: mouth black, ferruginous at the base, reaching the hind-hips: eyes prominent: feelers black: scutcheon of the fore-chest adorned with three tawny spots, the middle one club-shaped, the side pair nearly oval; hind-scutcheon dark ferruginous, its sides hardly angular: scutcheon of the middle-chest adorned with six tawny marks, the middle pair very small, the next pair nearly conical, the outer pair longer; hind border dark ferruginous, slightly excavated: abdomen obconical, longer than the chest, clothed with ferruginous hairs: legs ferruginous; shanks darker than the thighs; feet black; fore-thighs armed with three tawny teeth: wings more iridescent than usual, adorned with blue and purple lustre, brown and tawny and marked with black at the base; veins bright tawny; longitudinal veins towards the tips and cross-veins clouded with brown; flaps tinged with brown, bright pale red towards the base. Length of the body 21 lines; of the wings 60 lines.

a—f. New Holland.

### 2. FIDICINA MANNIFERA.

*Tettigonia mannifera*, *Fabr. Syst. Rhyn.* 36, 13. *Stoll, Cic.* 88, pl. 23, f. 126.

*Cicada mannifera*, *Germ. Silb. Rev. Ent.* ii. 56, 1. *Burm. Handb. Ent.* ii. 1, 183, 8. *Blanch. Hist. Ins.* iii. 167, 15.

*Cicada cantatrix?* *Germ. Thon, Arch.* ii. 2, 5, 36, 51.

a. Brazil. Presented by J. G. Children Esq.

b, c. Brazil. From Mr. Mornay's collection.

d—g Brazil.

### 3. FIDICINA RECTA, Fcm.

*Nervus transversus* 1us *ferè rectus, valdè obliquus, angulum perobtusum fingens*, 2o *ferè triplò ejus longitudine divisus*; 2us *subcurvus, valdè obliquus, angulum perobtusum fingens*, 1i *dimidio vix longior*; 3us *undatus, subobliquus, angulum vix acutum fingens*; 4us *undatus, obliquus, angulum acutum fingens*, 3o *multò longior*.

Second marginal areolet full seven-eighths of the length of the first: first cross-vein nearly straight, very oblique, forming an extremely obtuse angle, parted from the second by nearly thrice its

length; second very slightly curved, very oblique, forming an extremely obtuse angle, hardly more than half the length of the first; third waved, slightly oblique, forming a hardly acute angle; fourth waved, oblique, forming an acute angle, much longer than the third; fifth curved, nearly upright, forming a slightly acute angle. Body black, short, broad, partly covered with tawny down: head as broad as the fore-chest; a tawny dot in front of the crown; face very slightly convex: mouth black, tawny at the base, reaching the hind-hips: eyes not prominent: feelers black: hind-scutcheon of the fore-chest adorned with two large tawny spots, almost straight on each side, which, however, is very slightly concave and has an obtuse angle near the base of each fore-wing: scutcheon of the middle-chest adorned with two small tawny spots near the middle of its hind border, which is hardly excavated: abdomen obconical, longer than the chest: drums tawny, extremely small, far apart: legs dark tawny; thighs, especially the fore pair and the middle pair, striped with black: tips of the shanks, feet and fore-shanks black: fore-thighs armed with three black teeth, of these two are long and one very small: wings colourless, green along the fore border for half the length, dark brown from thence to the tips, towards the base black, to which colour succeeds a small space adorned with opaline lustre; veins tawny, black towards the tips; first and second cross-veins and the adjoining parts of the longitudinal veins clouded with dark brown; flaps black towards the base. Length of the body 18 lines; of the wings 54 lines.

a. Silhet. From Mr. Sowerby's collection.

#### 4. FIDICINA NIVIFERA, Mas.

*Nervus transversus* 1us subcurvus, valdè obliquus, angulum perobtusum fingens, 2o ferè triplò ejus longitudine divisus; 2us subcurvus obliquus, angulum valdè obtusum fingens, 1i dimidio longitudine; 3us undatus, obliquus, angulum subacutum fingens; 4us undatus, obliquus, angulum acutum fingens, 3o multò longior.

Second marginal areolet as long as the first: first cross-vein slightly curved, very slanting, forming an extremely obtuse angle, parted from the second by nearly thrice its length; second very slightly curved, slanting, forming a very obtuse angle, full half the length of the first; third waved, slanting, forming a slightly acute angle; fourth waved, slanting, forming an acute angle, much shorter than the third; fifth slightly curved, nearly upright, forming an acute angle. Body black, shining, short and broad, partly clothed with golden hairs which are most prevalent beneath: head very broad

and short, a little broader than the fore-chest; face slightly convex, not at all prominent: feelers and mouth black; the latter reaching to the middle-hips: sides of the fore-chest forming very obtuse angles near the fore-wings, thence straight for a space, afterwards abruptly widened, and lastly slightly convex to the fore border; furrows dark ferruginous; hind-scutcheon rather broad, ferruginous with the exception of the border: scutcheon of the middle-chest adorned with four ferruginous stripes; the side pair communicating with two small ferruginous spots, rather in advance of the middle pair, which are nearly straight; hind border ferruginous, its excavation rather broad but very shallow: abdomen obconical, hardly longer than the chest, adorned on each side with a very large white patch which occupies the sides of the segments from the second to the fifth; under side with a very broad ferruginous stripe on each side: opercula pitchy, close, rather large; drums tawny, very large, slightly overlapping, much more than half the length of the abdomen, nearly triangular, tapering much towards the tips: legs black; thighs with ferruginous stripes; shanks ferruginous with black tips; fore-thighs armed with two long teeth: wings colourless, dark brown at the base, tinged with green from thence to the middle of the fore-wings, clouded with brown at the tips of the veins of all the wings; first and second cross-veins clouded with dark brown; veins bright green, black towards the tips; veins of the hind-wings very pale green for a space before the black tips; flaps of the hind-wings colourless, brown at the base and along the borders. Length of the body 20 lines; of the wings 62 lines.

a. Java. From Mr. Argent's collection.

#### 5. FIDICINA ACUTA.

*Cicada acuta*, Signoret, *Rev. Zool.* 1849, 409, 4, pl. 10, f. 3, 3a.

*F. nivifera* may be a variety of this species.

#### 6. FIDICINA PICEA, Fem.

*Nervus transversus* 1us curvus, valdè obliquus, angulum perobtusum fingens, 2o triplò ejus longitudine divisus; 2us curvus, valdè obliquus, angulum perobtusum fingens, 1i longitudine; 3us undatus obliquus, angulum acutum fingens; 4us undatus, obliquus, angulum acutum fingens, 3o multò longior.

Second marginal areolet about five-sixths of the length of the first: first cross-vein curved, very slanting, forming an extremely obtuse angle, parted from the second by thrice its length; second curved, very slanting, forming an extremely obtuse angle, as long

as the first; third waved, slanting, forming an acute angle; fourth waved, slanting, forming an acute angle, much longer than the third; fifth curved, nearly upright, forming an almost right angle. Body pitchy, short, broad, very hairy: head almost black about the eyelets; face very slightly convex, not at all prominent: mouth pitchy, paler at the base, hardly reaching beyond the middle-shanks: eyes prominent: feelers black: fore-chest very little broader than the head; scutcheon slightly convex on each side with the exception of a very slight excavation: a black oblique stripe on each side of the scutcheon of the middle-chest, whose hind border has a moderately deep excavation: abdomen almost black, slightly obconical, rather compressed at the tip, not longer nor broader than the chest: legs dark tawny, hairy: tips of the claws black; fore-thighs armed with two stout tawny teeth: wings slightly tinged with brown, dark brown at the base; veins very dark green, pitchy at the base and along the fore border; flaps brown at the base. Length of the body 18 lines: of the wings 56 lines.

a. Mexico. From M. Hartweg's collection.

#### 7. FIDICINA BUBO, Mas et Fem.

*Nervus transversus* 1us subundatus, subobliquus, angulum vix distinctum fingens, 2o plus triplô ejus longitudine divisus; 2us subundatus, valdè obliquus, angulum perobtusum fingens, 1i longitudine; 3us undatus, subobliquus, angulum vix acutum fingens; 4us undatus, obliquus, angulum subacutum fingens, 3o longior.

Second marginal areolet nearly five-sixths of the length of the first: first cross-vein very slightly waved, very slanting, forming an extremely slight angle, parted from the second by more than thrice its length; second very slightly waved, very slanting, forming an extremely obtuse angle, as long as the first; third waved, slightly slanting, forming a hardly acute angle; fourth waved, slanting, forming a slightly acute angle, longer than the third; fifth curved, upright, forming a right angle.

*Male*.—Body black, short, broad, shining, partly clothed with tawny down which forms patches on the chest: head as broad as the fore-chest, adorned in front with five tawny spots, the largest on the crown: mouth and feelers black: eyes prominent: fore chest with two dark tawny spots near the hind border of the scutcheon; its sides forming very obtuse angles at the base of the fore-wings, and having a very slight excavation at half the length from thence to the fore border; hind-scutcheon rather broad, its hind border dark

tawny; scutcheon of the middle-chest with two curved converging furrows; two tawny spots on each side; excavation on the hind border very slight; abdomen obconical, a little longer than the chest; a dark tawny stripe along each side beneath: opercula black, rather large; drums large, black, nearly half the length of the abdomen, irregularly triangular, tawny on the outer sides and at the tips, which are narrow and pointed: legs black; thighs tawny beneath except at the base and at the tips; a slender tawny band near the base of each middle-shank; hind-shanks tawny, black at the base and at the tips; a broad tawny band on each hind-foot; fore-thighs armed with two long black teeth: wings dark brown for half the length from the base, slightly tinged with brown from thence to the tips, adorned at the base of each fore-wing with a tawny spot beyond which there is a tawny stripe extending nearly half the length of the fore border; veins tawny for half the length from the base, black from thence to the tips.

*Fem.*—Abdomen much longer than the chest.

Length of the body 17—19 lines; of the wings 56 lines.

*a, b.* Hong Kong. Presented by J. C. Bowring, Esq.

*Note.*—*C. Aquila* and *C. Accipiter* have two additional cross-veins dividing the third and fourth discoidal areolets. There are indications of this disposition in other large species, and nearly all the *Cicadæ*, with the exception of a few of the smallest, show the rudiments of these veins between the above-mentioned areolets where the longitudinal vein has a knot which is the point of intersection of the invisible cross-veins.

## 8. FIDICINA ACCIPITER, Mas.

*Nervus transversus* 1us subundatus, subobliquus, angulum perobtusum fignens, 2o plus duplò ejus longitudine divisus; 2us subcureus, obliquus, angulum valdè obtusum fignens; 3i dimidio vix longior; 3us subundatus, subobliquus, angulum rectum fignens; 4us subundatus, obliquus, angulum subacutum fignens, 3o multò longior.

Second marginal areolet a little shorter than the first: first cross-vein very slightly waved, very slanting, forming an extremely obtuse angle, parted from the second by very much more than twice its length; second very slightly curved, slanting, forming a very obtuse angle, hardly more than half the length of the first; third very slightly waved, slightly slanting, forming a right angle; fourth slightly waved, slanting, forming a slightly acute angle, much lon-

ger than the third; fifth curved, upright, forming a hardly acute angle. Body black, short, broad, shining, partly clothed with tawny hairs: head as broad as the fore-chest; face slightly convex, not at all prominent; mouth black, reaching the middle-hips: eyes not prominent: feelers black; scutcheon of the fore-chest furrowed, having on each side a tawny spot which is different in size and shape from that of *C. Aquila*: sides very slightly convex in front and behind, slightly notched in the middle part: scutcheon of the middle-chest adorned with a dark tawny spot on each side of the excavation, which is very slight: abdomen obconical, a little longer than the chest, dark tawny on each side towards the base, and thence to the tip clothed with deep tawny down excepting a stripe along the middle; under side dark tawny: opercula large, black, close, tawny on each side: drums tawny, large, more than half the length of the abdomen, irregularly triangular, narrow, pointed and slightly curved towards the tips, adorned with innumerable pale ringlets: a short black horn at the tip of the abdomen: legs black; four hinder thighs dark tawny beneath; fore-thighs armed with two long black teeth: wings brown, adorned with purplish and copper lustre, blackish brown mottled with pale brown on more than one-third of the length from the base of the fore-wings, and on more than two-thirds of the hind-wings; brands dark brown: veins along the fore borders of the fore-wings clouded with dark brown to the tips; veins tawny, black towards the tips of the fore-wings; flaps pale brown, adorned with numerous parallel streaks, black at the base, dark brown along the fore border. Length of the body 21 lines: of the wings 57 lines.

a. Philippine Islands. From Mr. Cuming's collection.

#### 9. FIDICINA AQUILA, Fem.

*Nervus transversus* 1us ferè rectus, perobliquus, angulum perobtusum fingens, 2o plus triplò ejus longitudine divisus; 2us subcurvus, perobliquus, angulum perobtusum fingens, 1i longitudine; 3us subundatus, subobliquus, angulum rix acutum fingens; 4us subundatus, obliquus, angulum acutum fingens, 3o multò longior.

Second marginal areolet about five-sixths of the length of the first: first cross-vein nearly straight, extremely slanting, forming an extremely obtuse angle, parted from the second by a little more than thrice its length; second slightly curved, extremely slanting, forming an extremely obtuse angle, as long as the first; third slightly waved, slightly slanting, forming a hardly acute angle; fourth slightly waved, slanting, forming an acute angle, much longer than the third; fifth curved, upright, forming a hardly acute angle. Body black,

short, broad, shining, partly clothed with tawny hairs: head short and broad, a little narrower than the fore-chest; face slightly convex, not at all prominent: mouth black, reaching the hind-lips: eyes not prominent: feelers black: sides of the fore-chest slightly concave in the middle, slightly convex before and behind; hind-scutcheon rather broad, with a short dark tawny streak on each side along the fore border: hind border of the scutcheon of the middle-chest dark tawny, its excavation very slight: abdomen obconical, longer than the chest, tawny on each side and beneath: oviduct ferruginous: legs black; hind-thighs tawny beneath; hind-shanks tawny, black at the base and at the tips, beset with black spines; fore-thighs armed with two long black teeth: fore-wings rather narrow and pointed, slightly tinged with pale brown, black for more than one-third of the length from the base, and thence dark brown along one-fourth of the breadth along the fore border to the tips; hind-wings black for more than half the length from the base, almost colourless from thence to the tips; flaps dark brown; veins of the fore-wings tawny, black towards the tips; veins of the hind-wings black. Length of the body 19 lines; of the wings 55 lines.

a. Corea. Presented by Sir E. Belcher.

#### 10. FIDICINA TAURUS, Fem.

*Nervus transversus* 1us subundatus, obliquus, angulum obtusum fingens, 2o quadruplò ejus longitudine divisus; 2us curvus, subobliquus, angulum subobtusum fingens, 1o paulò brevior; 3us fere rectus, subobliquus, angulum rectum fingens; 4us subundatus, obliquus, angulum subacutum fingens, 3o multò longior.

Second marginal areolet nearly five-sixths of the length of the first: first cross-vein very slightly waved, slanting, forming an obtuse angle, parted from the second by four times its length; second curved, slightly slanting, forming a slightly obtuse angle, a little shorter than the first; third nearly straight, slightly slanting, forming a right angle; fourth slightly waved, slanting, forming a slightly acute angle, very much longer than the third; fifth curved, upright, forming a hardly acute angle. Body tawny, short, broad: head very broad; face very slightly convex in front, not at all prominent: mouth tawny with a pitchy tip, extending a little beyond the middle-lips: eyes prominent: feelers black: fore-chest as broad as the head, slightly tinged with green; hind-scutcheon broad, furrowed, tinged with ferruginous colour, forming at the base of each fore-wing an extremely obtuse angle whose sides are very slightly convex: scut-



cheon of the middle-chest adorned with four dark green obconical stripes, the middle pair shorter than the outer pair; cross-ridge dark green; excavation on the hind border shallow: abdomen pitchy above, shorter and a little broader than the chest, with the exception of its tip which is compressed its length does not exceed its breadth: legs tawny: fore-feet and tips of the shanks pitchy; fore-thighs armed with two teeth: wings very pale brown, much darker at the base and along the fore borders: veins dark green, black towards the tips; flaps brown at the base and along the veins. Length of the body 21 lines; of the wings 58 lines.

#### 11. FIDICINA CORVUS, Fem.

*Nervus transversus* 1us subundatus valdè obliquus, angulum perobtusum fingens, 2o ferè triplo ejus longitudine divisus; 2us subcurvus, obliquus, angulum valdè obtusum fingens, Vi dimidio non longior; 3us subundatus, obliquus, angulum subacutum fingens; 4us subundatus, obliquus, angulum acutum fingens, 3o multò longior.

Second marginal areolet more than five-sixths of the length of the first: first cross-vein very slightly waved, very slanting, forming an extremely obtuse angle, parted from the second by nearly thrice its length: second slightly curved, slanting, forming a very obtuse angle, not more than half the length of the first; third slightly waved, slanting, forming a very slightly acute angle; fourth slightly waved, slanting, forming an acute angle, much longer than the third; fifth curved, nearly upright, forming an almost right angle. Body black, short, broad, adorned here and there with patches of bright tawny down: head nearly as broad as the fore-chest; face very convex, adorned with a tawny spot: mouth black, reaching the hind-lips: feelers black: eyes not prominent: scutcheon of the fore-chest broad, slightly widened and forming a very obtuse angle at the base of each fore-wing, nearly straight on each side: hind border of the middle-chest very slightly excavated: abdomen obconical, very little longer than the chest, adorned with a tawny spot on each side of the tip beneath; legs black; thighs striped with tawny; hind-shanks tawny, black at the base and at the tips; fore-thighs armed with two long black teeth: wings nearly colourless with a slight pale brown tinge at the tips, very dark brown towards the base; fore border dark brown, striped with green, veins black, greenish towards the base. Length of the body 17 lines; of the wings 54 lines.

a. Silhet. From Mr. Sowerby's collection.

## 12. FIDICINA APER, Mas.

*Nervus transversus lvs subcurvus, obliquus, angulum valdè obtusum figens, 2o sexties ejus longitudine divisis; 2us subcurvus, valdè obliquus, angulum perobtusum figens, 1o multò longior; 3us rectus, subobliquus, angulum subobtusum figens; 4us subundatus, obliquus, angulum acutum figens, 3o plus duplò longior.*

Second marginal arcolet less than three-fourths of the length of the first: first cross-vein slightly curved, slanting, forming a very obtuse angle, parted from the second by six times its length; second slightly curved, very slanting, forming an extremely obtuse angle, much longer than the first; third straight, very slightly slanting, forming a slightly obtuse angle; fourth slightly waved, slanting, forming an acute angle, more than twice the length of the third; fifth curved, almost upright, forming a hardly acute angle. Body tawny, short and broad: head full as broad as the fore-chest; crown adorned with two irregular and branched black bands which are united between the eyelets: face very slightly convex: mouth tawny with a black tip, reaching the hind-hips: eyes prominent: feelers black: scutcheon of the fore-chest adorned along the hind border with a black band, which in the middle is widened into a triangle: furrows black; hind-scutcheon with three extremely shallow excavations on the hind border, slightly convex and forming a very obtuse angle near the base of each fore-wing, blackish on each side: scutcheon of the middle-chest pitchy on the disk and having an oblique black stripe on each side; hind border rather deeply excavated: abdomen obconical, a little longer than the chest, pitchy above, ferruginous and clothed with pale down along the hind border and on each side of the segments: opercula pitchy, small; drums tawny, very small, rather far apart: legs tawny; claws and tips of the fore-thighs and of the hind-shanks black; fore-thighs armed with one stout tooth: wings colourless, but with an extremely slight tawny tinge, black towards the base, ferruginous along the fore border; veins ferruginous, black towards the tips; first and second cross-veins clouded with dark brown; flaps black towards the base and along the fore border. Length of the body 18 lines; of the wings 48 lines.

a. Cayenne. Presented by H. C. Rothery, Esq.

## 13. FIDICINA RANA, Mas.

*Nervus transversus* 1us subrectus, valdè obliquus, angulum perobtusum fingens, 2o plus triplò ejus longitudine divisus; 2us subundatus, perobliquus, angulum perobtusum fingens, 1o multò longior; 3us undatus, fere erectus, angulum vix obtusum fingens; 4us subundatus, obliquus, angulum acutum fingens, 3o multò longior.

Second marginal areolet full three-fourths of the length of the first: first cross-vein nearly straight, very slanting, forming an extremely obtuse angle, parted from the second by more than thrice its length; second slightly waved, extremely slanting, forming an extremely obtuse angle, much longer than the first; third waved, nearly upright, forming a hardly obtuse angle; fourth slightly waved, slanting, forming an acute angle, much longer than the third; fifth slightly curved, upright, forming a hardly acute angle. Body dark tawny, short and broad; head nearly as broad as the fore-chest; face slightly convex: mouth tawny with a black tip, reaching the hind-hips: eyes not prominent: feelers tawny at the base: hind-scutcheon of the fore-chest paler tawny, obtusely angular: scutcheon of the middle-chest pitchy; excavation on the hind border rather deep, forming half a circle: abdomen obconical, shorter and narrower than the fore-chest, pitchy above; tip and hind borders of the segments tawny: opercula small; drums tawny, far apart, about one-fourth of the length of the abdomen: legs dark tawny, clothed with paler hairs; claws tawny with black tips; fore-thighs armed with two stout tawny teeth: wings colourless, pitchy at the base, dark tawny along the fore border: cross-veins and tips of the longitudinal veins of the marginal areolets clouded with brown; primitive areolet tawny: flaps pitchy at the base. Length of the body 15 lines; of the wings 48 lines.

## 14. FIDICINA CHLOROGENA, Mas.

*Nervus transversus* 1us subcurvus, valdè obliquus, angulum perobtusum fingens, 2o plus duplò ejus longitudine divisus; 2us valdè curvus, obliquus, angulum subobtusum fingens, 1o multò brevior; 3us subundatus, obliquus, angulum rectum fingens, 4us curvus, obliquus, angulum vix acutum fingens, 3o multò longior.

Second marginal areolet more than three-fourths of the length of the first: first cross-vein very slightly curved, very slanting, form-

ing an extremely obtuse angle, parted from the second by more than twice its length; second much curved, slanting, forming a slightly obtuse angle, much shorter than the first: third very slightly waved, slanting, forming a right angle; fourth curved, slanting, forming a hardly acute angle, much longer than the third; fifth curved, nearly upright, forming an acute angle. Body tawny, short, broad, clothed with paler hairs: head hardly narrower than the fore-chest: crown adorned with an irregular black band which incloses the eyelets; face very slightly convex, adorned in front with a black stripe: mouth tawny with a black tip, reaching beyond the middle-hips: eyes prominent: feelers dark tawny: scutcheon of the fore-chest tinged with green: hind-scutcheon green, forming on each side a very obtuse angle, having three very shallow excavations on the hind border: scutcheon of the middle-chest adorned with two black curved marks which taper from the fore border; hind border tinged with green, rather slightly excavated: abdomen almost linear till near the tip, shorter than the chest; hind borders of the segments tinged with green: opercula none: drums tawny, not far apart, nearly half the length of the abdomen: legs tawny, clothed with paler hairs; tips of the claws black; fore-thighs armed with two stout tawny teeth: wings colourless, bright grass-green near the base, dark tawny along the fore border; veins dark tawny; a tawny tinge on the hind-wings near the base which is tawny. Length of the body 15 lines: of the wings 45 lines.

## 15. FIDICINA OPALINA.

*Fidicina opalina*, *Amgot et Serr. Hist. Nat. Hém.* 472, 2.

*Cicada opalina*, *Germ. Thon, Arch.* ii. 2, 52. *Silb. Rev. Ent.* ii. 57, 3.

*a.* Brazil. Presented by J. G. Children, Esq.

*b—d* Brazil.

## 16. FIDICINA ATRATA.

*Tettigonia atrata*, *Fabr. Syst. Ent.* 681, 15. *Sp. Ins.* ii. 321, 18.

*Mant. Ins.* ii. 267, 22. *Ent. Syst.* iv. 24, 28. *Syst. Rhyn.* 42.

44. *Gmel. Ed. Syst. Nat.* i. 3, 2098, 80.

*Cicada atrata*, *Germ. Thon, Arch.* ii. 2, 55. *Silb. Rev. Ent.* ii. 68, 30.

*Cicada nigra*, *Oliv. Enc. Méth.* v. 750, 17. pl. 111, f. 5. *Stoll, Cic.* 84, pl. 22, f. 118.

*Cicada atra*, *Signoret, Rev. Zool.* 1849, 406. 1, pl. 10, f. 1.

*a—g* China.

## 17. FIDICINA INTERMEDIA?

*Cicada intermedia?* *Signoret, Rev. Zool.* 1849, 406, pl. 10, f. 2.

*a.* Tenasserim. Presented by — Packinan, Esq.

## 18. FIDICINA VICINA?

*Cicada vicina?* *Signoret, Rev. et Mag. de Zool.* 1849. 410, 5, pl. 10, f. 4.

*a.* Silhet. From Mr. Sowerby's collection.

*b.* ———?

## 19. FIDICINA OPERCULATA.

*Cicada operculata, Carreno.*

*a, b.* ———?

## 20. FIDICINA OPERCULARIS.

*Cicada opercularis, Oliv. Enc. Méth.* v. 749, 12, pl. 111, f. 1.  
*Stoll, Cic.* 25, pl. 3, f. 13. *Germ. Thon, Arch.* ii. 2, 45. *Signoret, Rev. Zool.* 1849. 408, 3.

## 21. FIDICINA IMMACULATA.

*Cicada immaculata, Oliv. Enc. Méth.* v. 752, 29, pl. 112, f. 7.  
*Stoll, Cic.* 40, pl. 8, f. 39. *Signoret, Rev. Zool.* 1849, 410, 6.

*a, b.* North Bengal. From Miss Campbell's collection.

## 22. FIDICINA? REPANDA.

*Cicada repanda, Linn. Syst. Nat.* i. 2, 707, 17. *Mus. Lud. Utr.* 159, 6. *Gmel, Ed. Syst. Nat.* i. 3, 2097, 17. *Deg. Ins.* iii. 209, 15, pl. 33, f. 1. *Oliv. Enc. Meth.* v. 754, 36. *Germ. Thon, Arch.* ii. 220. *Silb. Rev. Ent.* ii. 78. c.

*Tettigonia repanda, Fabr. Sp. Ins.* ii. 321, 16. *Mant. Ins.* ii. 267, 20. *Ent. Syst.* iv. 23, 24. *Syst. Rhyn.* 41, 39.

## 23 FIDICINA LITERATA, Mrs.

*Nervus transversus* 1us ferè rectus, valdè obliquus, angulum perobtusum fingens, 2o ferè triplò ejus longitudine divisus; 2us ferè rectus, valdè obliquus, angulum valdè obtusum fingens, 1o brevior; 3us undatus, subobliquus, angulum vix obtusum fingens; 4us subcurvus, obliquus, angulum subacutum fingens, 3i longitudine.

Second marginal areolet full five-sixths of the length of the first: first cross-vein almost straight, very slanting, forming an extremely obtuse angle, parted from the second by almost thrice its length; second almost straight, very slanting, forming a very obtuse angle, shorter than the first; third waved, slightly slanting, forming a hardly obtuse angle; fourth slightly curved, slanting, forming a very slightly acute angle, as long as the third; fifth slightly curved, nearly upright, forming an almost right angle. Body black above, pale tawny beneath: head a little narrower than the fore-chest, adorned on each side of the face with a tawny band whose hind border is much excavated; on each side of the hind border there is a tawny band which is much notched, and ascends on each side of the eyelets; face black, slightly convex, adorned with two black spots, one in front, the other on the hind border: mouth tawny with a pitehy tip reaching beyond the middle-hips: eyes not prominent: feelers black: scutcheon of the middle-chest tawny with a black hind border: in the middle are two triangular black spots including tawny spaces and communicating by their hind angles with the border: hind-scutcheon tawny, having on each side a very shallow rim which forms a very obtuse angle whose fore side is very slightly excavated and about twice the length of its hind side, the latter is very slightly convex: scutcheon of the middle-chest adorned with two U-shaped tawny marks which communicate with two large tawny spots whose inner sides are much excavated; hind border tawny, very slightly excavated in the middle where it has a short broad tawny band which sends fourth two short oblique tawny branches towards the spots above mentioned; on each side of the latter are two tawny spots, one small, the other large and close to the base of the fore-wing: abdomen longer but not broader than the chest, somewhat ferruginous on each side, tinged with green towards the tip beneath: opercula rather large; drums rather large, pale tawny tinged with green, slightly overlapping, less than half the length of the abdomen: legs pale tawny: wings colourless, pale tawny with some pitehy marks at the base; veins pale tawny, ferruginous towards the

tips; flaps pale tawny towards the base, a tawny streak along the fore border. Length of the body 20 lines; of the wings 59 lines;

#### 24. FIDICINA EXCAVATA, Mas.

*Nervus transversus* 1us *ferè* *rectus*, *perobliquus*, *angulum perobtusum* *figens*, 2o *plus duplò ejus longitudine divisus*; 2us *ferè* *rectus*, *perobliquus*, *angulum non figens*, 1o *paullò brevior*; 3us *valdè curvus*, *ferè* *erectus*, *angulum rectum figens*; 4us *obliquus*, *undatus*, *angulum acutum figens*, 3o *multiò longior*.

Second marginal areolet about four-fifths of the length of the first: first cross-vein nearly straight, extremely slanting, forming an extremely obtuse angle, parted from the second by more than twice its length; second nearly straight, extremely slanting, forming an almost straight line with the longitudinal vein, a little shorter than the first: third very much curved, nearly upright, forming a right angle; fourth oblique, waved, forming an acute angle, much longer than the third; fifth curved, nearly upright, forming a hardly acute angle. Body dark tawny, rather short and broad: head a little narrower than the fore-chest; face slightly convex, tinged with green: mouth tawny with a black tip, reaching the hind-lips: eyes not prominent: feelers tawny at the base: hind-scutcheon of the fore-chest slightly tinged with green, excavated and forming a very obtuse angle in the middle of the hind border, slightly widened and forming a very obtuse angle above the base of each fore-wing: scutcheon of the middle-chest adorned with two black obconical marks which proceed from the fore border, and are each accompanied on the outer side by a small black spot; excavation on the hind border rather deep, forming half a circle: abdomen obconical, very little longer than the chest: fore borders of the segments black; drums tawny, not far apart, about one-fourth of the length of the abdomen: legs tawny; claws black towards the tips; fore-thighs streaked with black, armed with three black teeth, of these two are rather long, and one is short: wings pale tawny, brownish tawny at the base; cross-veins clouded with brown; tips of the longitudinal veins of the marginal areolets very slightly clouded with brown; flaps brownish tawny towards the base. Length of the body 18 lines: of the wings 50 lines.

a. South America.

25. *FIDICINA NIGRORufa*, Mas et Fem.

*Nerrus transversus* 1us subundatus, valdè obliquus, angulum perobtusum fingens, 2o ferè triplò ejus longitudine divisus; 2us subcurvus, valdè obliquus, angulum perobtusum fingens, 1o brevior; 3us ferè rectus, obliquus, angulum rix acutum fingens; 4us ferè rectus, obliquus, angulum subacutum fingens, 3o multò longior.

Second marginal areolet a little more than three-fourths of the length of the first: first cross-vein slightly waved, very slanting, forming an extremely obtuse angle, parted from the second by almost thrice its length; second slightly curved, very slanting, forming an extremely obtuse angle, shorter than the first; third almost straight, slanting, forming a hardly acute angle; fourth almost straight, slanting, forming a slightly acute angle, much longer than the third; fifth curved, nearly upright, forming a hardly acute angle.

*Male*.—Body black, shining, short and broad, thickly covered with white on each side beneath: head narrower than the fore-chest; face convex: eyes prominent: mouth black, ferruginous towards the base: feelers black: fore-chest narrower in front than behind, rounded or almost forming an obtuse angle near the base of each fore-wing, nearly straight from thence to the fore border where it has a small tawny spot; hind-scutcheon rather narrow in the middle, broader on each side: hind border of the scutcheon of the middle-chest dark red on each side, with a moderately deep excavation in the middle: abdomen dark red, obconical, a little longer than the chest, adorned above with black bands which do not extend to the sides; opercula none: tymbals white: drums very small: legs black; middle and hind-thighs striped with red; middle-shanks dark red; hind-shanks and hind-feet pale red; claws red with black tips; fore-thighs armed with three black teeth: wings colourless, blackish and adorned with red at the base, black along the fore border; veins black, pitchy at the base; flaps of the hind-wings colourless, blackish towards the base and along the fore border.

*Fem*.—Abdomen hardly larger than the chest, scarcely decreasing in breadth till near the tip where it is narrow, obconical, compressed and black: the black bands extend across the whole breadth.

Length of the body 11—13 lines; of the wings 36—40 lines.

*a, b.* Venezuela. From Mr. Dyson's collection.



## 26. FIDICINA TIBICEN.

*Cicada tibicen*, Linn. *Syst. Nat.* 2, 707, 19. *Mus. Lud. Utr.* 160. *Seba*, *Mus.* iv. pl. 85, f. 9, 10. *Oliv. Enc. Méth.* v. 7, 48, 11, pl. 110, f. 4. *Houttuin*, *Nat. Hist.* 280, 20, pl. 31, f. 3. *Gmel. Ed. Syst. Nat.* i. 3, 2099, 19. *Stoll*, *Cic.* 88, 89, pl. 23, f. 126, *Thon*, *Arch.* ii. 2, 44. *Silb. Rev. Ent.* ii. 64, 25.

*Cicada lyricen*, *Deg. Ins.* iii. 212, 14, pl. 22, f. 23.

*Tettigonia tibicen*, *Fabr. Syst. Ent.* 679, 5. *Sp. Ins.* ii. 319. 5. *Mant. Ins.* ii. 266, 8. *Ent. Syst.* iv. 18, 8. *Syst. Rhyn.* 35, 12.

*Panorpa*, *Brown*, *Jam.* 436, pl. 43, f. 15.

*Gueruca Eremembi*, *Marcgr. Brasil*, 256.

*Tibicen*, *Merian*, *Ins. Surinam*, pl. 49.

*Cicada pruinosa*? *Say. Harris, Ins. New Engl. Lam. Hist. Anim. Invert.* iii. 485, 2. *Germ. Thon*, *Arch.* ii. 2, 44. *Silb. Rev. Ent.* ii. 64, 25.

*Cicada mannifera*, Linn. *Mus. Ad. fr.* i. 84.

a—d North America. Presented by E. Doubleday, Esq.

e. North America. Presented by J. G. Children, Esq.

f. Massachusetts. From Professor Sheppard's collection.

g—u. North America.

An insect of this species has in the left wing an additional cross-vein adjoining the second cross-vein.

## 27. FIDICINA POLYHYMNIA, Mas.

*Nervus transversus* 1us ferè rectus, subobliquus, angulum obtusum fngens, 2o quadruplò ejus longitudine divisus; 2us ferè rectus, subobliquus, angulum obtusum fngens, 1o brevior; 3us subundatus, obliquus, angulum vix acutum fngens; 4us undatus, obliquus, angulum subacutum fngens, 3o multò longior.

Second marginal areolet about five-sixths of the length of the first: first cross-vein almost straight, slightly slanting, forming an obtuse angle, parted from the second by full four times its length; second nearly straight, slightly slanting, forming an obtuse angle, shorter than the first; third slightly waved, slanting, forming a hardly acute angle; fourth waved, slanting, forming a slightly acute angle, much longer than the third; fifth slightly curved, very slightly slanting, forming a hardly obtuse angle. Body ferruginous: head nearly as broad as the fore-chest, adorned with two irregular and interrupted black bands, one on the crown, the other on the face which is rather prominent and very convex; mouth tawny with a

black tip, reaching the hind-hips: eyes prominent: feelers black: fore-chest a little narrower before than behind; furrows, sides and hind border of the scutcheon blackish; hind-scutcheon pale ferruginous, nearly as broad in the middle as on each side, where it forms two obtuse angles: scutcheon of the middle-chest adorned with three very broad obconical pitchy stripes; hind border very slightly excavated: abdomen obconical, pitchy, longer than the chest; hind borders of the segments ferruginous: opercula close, pitchy; drums tawny, large, meeting beneath, less than half the length of the abdomen: legs tawny; feet and fore-shanks pitchy; claws black; fore-thighs armed with three pitchy teeth, two of which are large and one extremely small: wings tinged with tawny; fore border ferruginous as far as the brand, pitchy from thence to the tip; veins black, ferruginous at the base; primitive areolet, fore-membrane, flaps at the base and along part of the hind border tawny. Length of the body 14 lines; of the wings 42 lines.

*a.* Philippine Islands. From Mr. Cuming's collection.

## 28. FIDICINA SUBGUTTATA, Fem.

*Nervus transversus* 1us *ferè rectus, valdè obliquus, angulum perobtusum* fingens, 2o *plus triplò ejus longitudine divisus*; 2us *curvus, obliquus, angulum obtusum* fingens, 1o *multò longior*; 3us *curvus, obliquus, angulum subacutum* fingens; 4us *curvus, 1o longior et obliquior, angulumque acutiorem* fingens.

Second marginal arcelet more than three-fourths of the length of the first: first cross-vein nearly straight, very slanting, forming an extremely obtuse angle, parted from the second by more than thrice its length; second curved, slanting, forming an obtuse angle, much longer than the first; third curved, slanting, forming a slightly acute angle; fourth curved, longer and more slanting than the third and forming a more acute angle; fifth curved, upright, forming a very slightly acute angle. Body black, short, broad, tawny beneath: head full as broad as the fore-chest, adorned with a red dot between the cyclets, with a red stripe on each side of the hind border, and with a large red spot on each side of the face; the latter very convex, adorned above with a large red spot: mouth black, extending to the hind-hips: eyes hardly prominent: feelers black: fore-chest narrower before than behind; scutcheon short, adorned with a pale red stripe in the middle, and with two indistinct dark red dots on each side; hind-scutcheon very broad, dark red, slightly excavated on the hind border, blackish along the borders, slightly convex and not indented on each side: scutcheon of the middle-chest adorned

on the disk with two short very slender middle stripes, and on each side of them with a large triangular red spot, between which and each side there is a slender oblique red streak; hind border pale red, hardly excavated: abdomen obconical, a little shorter than the chest, adorned with a large yellow spot on each side near the base; under side adorned on the disk with a large pitchy spot, behind which are two pitchy dots: legs tawny; thighs and fore-hips streaked with black; feet, fore-shanks, and the tips of the middle-shanks black; claws black, tawny at the base; fore-thighs armed with two tawny teeth of moderate size: wings colourless; fore border ferruginous with a black stripe beneath as far as the brand, black from thence to the tip; veins tawny, tinged with ferruginous in the fore-wings, black towards the tips, marked with black at the base; primitive areolet tawny; fore-flaps pale buff; hind-flaps pale buff at the base and along some part of the veins. Length of the body 13 lines; of the wings 40 lines.

a. New Holland. Presented by the Earl of Derby.

## 29. FIDICINA FULLO, Mas et Fem.

*Nervus transversus lvs subcurvus, perobliquus, angulum perobtusum fingens, 2o ferè triplò ejus longitudine divisus; 2us subcurvus, valdè obliquus, angulum perobtusum fingens, 1i longitudine; 3us curvus, subobliquus, angulum subacutum fingens: 4us subcurvus, subobliquus, angulum subacutum fingens, 3i longitudine.*

Second marginal areolet more than three-fourths of the length of the first: first cross-vein very slightly curved, extremely slanting, forming an extremely obtuse angle, parted from the second by nearly thrice its length; second very slightly curved, very slanting, forming an extremely obtuse angle, as long as the first; third curved, slightly slanting, forming a slightly acute angle: fourth slightly curved, slightly slanting, forming a slightly acute angle, as long as the third; fifth curved, nearly upright, forming a very slightly acute angle.

*Male*.—Body black, short, broad, much powdered with white on the under side, clothed with pale hairs and down: head a little narrower than the fore-chest; three small tawny marks about the region of the eyelets: a short tawny band in front on each side of the face which is very convex: mouth ferruginous with a black tip, reaching to the hind borders of the drums: eyes prominent: feelers black, fore-chest a little narrower in front than behind: scutcheon adorned with a tawny middle stripe which tapers from the fore border

to the hind border, and with six large dark red spots which occupy the spaces between the furrows: hind-scutcheon tawny on each side and on the hind border, rounded and much widened at the base of each fore-wing, excavated on each side where the tawny border is interrupted, serrated towards the front: its hind border is very slightly concave towards each side, nearer which it is convex by reason of its unusual widening at the base of the fore-wing: scutcheon of the middle-chest adorned with four dark red obconical stripes, the inner pair much shorter than the outer pair, intermediate space black; sides, hind borders and cross-ridge tawny, a pitchy mark on each side of the latter just above the cross; hind border slightly excavated: abdomen obconical, hardly longer than the chest, adorned before the middle with a broad black band which is widest on each side; tip tawny: drums of moderate size, slightly overlapping, black with pale tawny borders, full one-third of the length of the abdomen: legs pitchy; hips with pale yellow streaks and tips: fore-thighs dark red, armed with two long teeth; middle-shanks adorned with a pale tawny spot near the base; hind-shanks pale pitchy, pale tawny beneath; hind-feet pale tawny with pitchy tips; claws black: wings colourless, ferruginous and marked with black at the base; veins pale tawny, darker towards the tips; primitive arcolelet tawny; brands brown; cross-veins clouded with brown; a row of large brown spots on the tips of the longitudinal veins of the submarginal arcolelets; fore border tawny; fore-membrane gray; flaps buff at the base.

*Fem.*—Oviduct dark red, black and serrated.

Length of the body 13 lines; of the wings 36 lines.

*Var. β. Mas.*—Under side of the abdomen dark ferruginous.

*a—c.* New Holland. Presented by the Haslar Hospital.

*d—f.* Swan River. Presented by Sir J. Richardson.

### 30. FIDICINA INTERSECTA, Mas.

*Nervus transversus* 1us *ferè* rectus, obliquus, angulum obtusum *figens*, 2o *plus triplò ejus longitudine divisus*; 2us *subcurvus*, obliquus, angulum obtusum *figens*, 1o *paullò longior*; 3us *subundatus*, obliquus, angulum *vix acutum figens*; 4us *subundatus*, obliquus, angulum *subacutum figens*.

Nearly allied to *F. internata*, but the third cross-vein joins the fore longitudinal vein after the fork in that species, and before the fork in *F. intersecta*. Second marginal arcolelet more than two-thirds of the length of the first: first cross-vein nearly straight, slanting, forming an obtuse angle, parted from the second by more than thrice its length; second slightly curved, very slanting, forming a very ob-

tuse angle, much longer than the first; third slightly curved, nearly upright, forming a right angle; fourth slightly waved, slanting, forming a slightly acute angle, longer than the third; fifth curved, nearly upright, forming a hardly acute angle. Length of the body 11 lines; of the wings 32 lines.

α. Port Essington. From Mr. Gould's collection.

### 31. FIDICINA INTERNATA, MAS.

*Nervus transversus* *Ius subcurvus*, valde obliquus, angulum valde obtusum fingens, 2o plus triplò ejus longitudine divisus; 2us *subcurvus*, angulum perobtusum fingens; 1o longior et obliquior; 3us *subcurvus*, subobliquus, angulum rectum fingens; *Ius subundatus*, obliquus, angulum acutum fingens, 3o multò longior.

Second marginal arcelet a little shorter than the first: first cross-vein very slightly curved, very slanting, forming a very obtuse angle, parted from the second by much more than thrice its length: second very slightly curved, forming an extremely obtuse angle, longer and more slanting than the first; third slightly curved, slightly slanting, forming a right angle, not joining the fourth marginal arcelet as is usual, but the second discoidal arcelet; fourth slightly waved, slanting, forming an acute angle, much longer than the third; fifth curved, nearly upright, forming a slightly acute angle. Body tawny, almost hairless: head a little broader than the fore-chest: a short black band across the crown, sending forth two short branches in front, and having behind it two short branches between which are two semicircles; a black stripe half encircling each eye: face prominent, very convex, adorned with two broad black stripes, between which above there is a slender black band: mouth tawny with a black tip, reaching the middle-lips: eyes very prominent: feelers black, tawny at the base: scutcheon of the fore-chest adorned with two black dots in the middle of the hind border, and with pitchy dots in the spaces between the furrows which are black; hind-scutcheon broad, forming a very obtuse angle near the base of the fore-wing, slightly excavated on each side, widened again towards the fore border: scutcheon of the middle-chest adorned with four black stripes; the middle pair triangular, slightly excavated, much shorter than the outer pair which are slightly oblique, much excavated and somewhat interrupted; a horse-shoe shaped black mark beyond the middle; excavation of the hind border slight: abdomen obconical, very little longer than the chest; a black, more or less interrupted and excavated band on the fore border of each segment; a black shining

spot on the tip; under side adorned with a broad pitchy band: opercula large, close, pale tawny; drums large, pale tawny, less than half the length of the abdomen, blackish on the inner side where they slightly overlap, black also on the outer border: legs pale tawny: thighs ferruginous towards the base; claws black; fore and middle-shanks and feet ferruginous; fore-thighs armed with three black teeth, one of which is very small: wings colourless, pale tawny and marked with black at the base; veins tawny, black towards the tips and along the hind border; fore border pale tawny for more than half its length, pitchy from thence till near the tip; fore borders of the flaps pale tawny. Length of the body 13 lines; of the wings 38 lines.

Port Essington. From Mr. Gould's collection.

### 32. FIDICINA OCHRACEA, Mas.

*Nervus transversus lvs rectus, obliquus, angulum valdè obtusum fingens, 2o quinquies ejus longitudine divisus; 2us rectus, obliquus, angulum valdè obtusum fingens, 1o paullo longior; 3us ferè rectus, subobliquus, angulum rectum fingens; 4us vir undatus, obliquus, angulum acutum fingens, 3o multò longior.*

Second marginal areolet a little shorter than the first: first cross-vein straight, slanting, forming a very obtuse angle, parted from the second by full five times its length; second straight, slanting, forming a very obtuse angle, a little longer than the first; third nearly straight, slightly slanting, forming a right angle; fourth indistinctly waved, slanting, forming an acute angle, much longer than the third; fifth indistinctly curved, nearly upright, forming a very slightly obtuse angle. Body ochreous: head full as broad as the fore-chest; a black band across the front, wider on each side than on the face which is convex and almost angular, but hardly prominent: mouth tawny with a black tip, reaching beyond the middle-lips: eyes prominent: feelers tawny at the base: fore-chest rather short: hind-scutcheon slightly excavated on the hind border, rounded at the base of the fore-wing, a little indented on each side: scutcheon of the middle-chest slightly mottled with paler colour, hardly excavated on the hind border: abdomen obconical, a little longer than the chest: opercula none: tymbals tawny, very small; drums very small, tawny, the distance between them equal to twice the breadth of each: legs tawny; tips of the claws black; fore-thighs armed with two long tawny teeth whose tips are pitchy: wings colourless; fore borders and veins ochreous; fore-membranes tawny; flaps

tawny at the base and along part of the hind border. Length of the body 12 lines; of the wings 33 lines.

### 33. FIDICINA PRASINA, Mas.

*Nervus transversus* 1us ferè rectus, perobliquus, vix angulum fingens, 2o plus duplò ejus longitudine divisus; 2us subcurvus, valdè obliquus, angulum perobtusum fingens, 1o brevior; 3us subundatus, obliquus, angulum subacutum fingens; 4us subundatus, obliquus, angulum subacutum fingens, 3o multò longior.

Second marginal arcolet nearly as long as the first: first cross-vein nearly straight, extremely slanting, hardly forming an angle, parted from the second by more than twice its length; second very slightly curved, very slanting, forming an extremely obtuse angle, shorter than the first; third slightly waved, slanting, forming a slightly acute angle; fourth very slightly waved, slanting, forming a slightly acute angle, much longer than the third; fifth curved, very slightly slanting, forming a slightly acute angle. Body tawny: head green, hardly narrower than the fore-chest, tawny about the eyelets whose region is adorned with a nearly semicircular black band which is continued along each side of the hind border, and thence upward for a short space by the side of each side; face rather prominent, adorned with a semicircular black band: mouth tawny, darker towards the tip, reaching the hind-hips: feelers tawny at the base: scutcheon of the fore-chest adorned with black marks along the furrows and on the hind border, tinged with green in the middle; hind-scutcheon green, forming near the base of each fore-wing a very obtuse and slightly rounded angle whose sides are very slightly convex and whose fore side is twice the length of its hind side: scutcheon of the middle-chest adorned with four oblique pitchy marks: the inner pair obconical, rather short, succeeded by a semicircular pitchy spot, the outer pair longer, much widened towards the base, linear from thence to the tips; hind border slightly excavated: abdomen black above, a little longer than the chest; hind borders of the segments and tip tawny; opercula large; drums pale tawny, rather large, occupying more than one-third of the length of the abdomen: legs pale tawny; thighs tinged with green; tips of the claws black; fore-thighs armed with two rather long black teeth: wings whitish, pale tawny and green at the base, bright green along the fore border for half the length, tawny from thence to the tips; veins pale reddish tawny; flaps pale tawny at the base. Length of the body 13 lines; of the wings 36 lines.

## 34. FIDICINA OLYMPUSA, Fem.

*Nervus transversus* 1us ferè rectus, subobliquus, angulum obtusum fingens, 2o quinquies ejus longitudine divisus; 2us subcurvus, obliquus, angulum valde obtusum fingens, 1o longior; 3us rectus, subobliquus, angulum rectum fingens; 4us subundatus, obliquus, angulum subacutum fingens, 3o ferè duplò longior.

Second marginal areolet about three-fourths of the length of the first: first cross-vein nearly straight, slightly slanting, forming an obtuse angle, parted from the second by five times its length; second slightly curved, slanting, forming a very obtuse angle, longer than the first; third straight, slightly slanting, forming a right angle; fourth very slightly waved, slanting, forming a very slightly acute angle, nearly twice the length of the third; fifth slightly curved, upright, forming a nearly right angle. Body ferruginous, tawny beneath: head nearly as broad as the fore-chest; crown adorned with a broad irregular pitchy band, between which and the hind border there are some pitchy dots; face convex, adorned above with a broad pitchy band: mouth tawny with a black tip, reaching nearly to the hind-hips: eyes not prominent: feelers black, tawny at the base: scutcheon of the fore-chest adorned with four black stripes; the middle pair long, widened on the fore border and on the hind border; the outer pair short and slightly curved; furrows and sides blackish; hind-scutcheon green, widened, rounded and adorned with a large pitchy mark at the base of each fore-wing, nearly straight on each side: scutcheon of the middle-chest adorned with four obconical black stripes; inner pair short with tawny borders; outer pair much longer, excavated into eight separate parts; a large black spot with a black dot on each side between the inner pair and the cross-ridge: hind border hardly excavated: abdomen obconical, longer than the chest; fore borders of the segments adorned with pitchy interrupted bands; oviduct ferruginous: drums pale tawny, very small, far apart; inner sides pitchy: legs tawny; tips of the shanks, of the feet and of the fore-thighs pitchy; tips of the claws black; fore-thighs armed with four tawny teeth, of these two are of moderate size, and two very short: wings colourless; fore border and veins green, black towards the tips; fore border armed with short black spines: first and second cross-veins and the longitudinal veins between them and between the first and the tip clouded with dark brown; fore-flaps fawn-colour; hind-flaps fawn-colour along the fore border and between the middle vein and the hind border. Length of the body 10 lines; of the wings 28 lines.

a. ——— ?



## Genus 12. CICADA.

*Cicada*, Linnæus, Amyot et Serv. Hist. Nat. Hém. 473, 374.

## 1. CICADA ADUSTA, Mas.

*Nervus transversus 1us rectus subobliquus, angulum obtusum fingens, 2o plus quadruplò ejus longitudine divisus; 2us subcurvus, obliquus, angulum valdè obtusum fingens, 1o multò brevior; 3us fere rectus, obliquus, angulum vix acutum fingens; 4us subcurvus, subobliquus, angulum vix obtusum fingens, 3o brevior.*

Second marginal areolet much more than two-thirds of the length of the first: first cross-vein straight, slightly slanting, forming an obtuse angle, parted from the second by more than four times its length; second slightly curved, slanting, forming a very obtuse angle, much shorter than the first; third almost straight, slanting, forming a hardly acute angle; fourth slightly curved, slightly slanting, forming a hardly obtuse angle, shorter than the third; fifth slightly curved, nearly upright, forming a slightly obtuse angle. Body tawny, darker here and there: head narrower than the fore-chest, pitchy about the eyelets: face very convex, not very prominent, adorned in front with two broad ferruginous stripes: mouth ferruginous with a black tip, reaching the hind-shanks: eyes very prominent: feelers black: scutcheon of the fore-chest adorned with two pitchy forked stripes proceeding from the fore border and slightly converging, behind them there are two triangular pitchy marks; hind border of the hind-scutcheon pitchy, its sides convex, each armed with a tooth: scutcheon of the middle-chest adorned with two nearly triangular pitchy spots, and on each side of these with a longer interrupted pitchy mark; four pitchy spots in a cross-row near the hind border which is very slightly excavated: abdomen obconical, pale ferruginous, a little longer than the chest, slightly compressed at the tip: drums very small, dark tawny, far apart: legs dark tawny, rather hairy; tips of the shanks, fore-feet and middle-feet pitchy; tips of the claws black; fore-thighs armed with two sharp teeth of moderate size: wings colourless, tawny at the base and along the fore border; on the fore-wings an almost imperceptible tawny tinge which is most apparent on the disks of the areolets towards the tips; first cross-vein clouded with brown; a brown spot on each of the second, third and fourth cross-veins: a row of brown spots on the tips of the longitudinal veins of the marginal areolets;

flaps tawny at the base, slightly clouded with brown along the fore border. Length of the body 23 lines; of the wings 68 lines.

a. Java. From Mr. Argent's collection.

## 2. CICADA TRIUPSILON, Mas.

*Nervus transversus 1us subcurvus, valdè obliquus, angulum perobtusum fingens, 2o ferè quinquies ejus longitudine divisus; 2us subcurvus, angulum perobtusum fingens, 1o longior et obliquior; 3us subcurvus, subobliquus, angulum rectum fingens; 4us subundatus, obliquus, angulum subacutum fingens, 3o multò longior.*

Second marginal arcelet more than two-thirds of the length of the first: first cross-vein very slightly curved, very slanting, forming an extremely obtuse angle, parted from the second by nearly five times its length; second very slightly curved, forming an extremely obtuse angle, longer and more slanting than the first; third very slightly curved, slightly slanting, forming a right angle; fourth slightly waved, slanting, forming a slightly acute angle, much longer than the third; fifth curved, nearly upright, forming an acute angle. Body ferruginous: head a little narrower than the fore-chest; crown adorned with an irregular black band; hind border black; face convex, rather prominent, blackish above and on each side in front: mouth ferruginous with a black tip, extending to the hind-lips: eyes not prominent: feelers black: scutcheon of the fore-chest black along the border and on the furrows; hind-scutcheon finely furrowed, much widened on each side and forming a very obtuse black angle whose fore side is very slightly concave and its hind side equally convex: scutcheon of the middle-chest adorned with seven black stripes; the three on each side slightly curved, almost concentric; the middle pair widened in front and united behind; hind border rather deeply excavated: abdomen nearly oval, longer than the chest, clothed with silky yellow down, paler beneath; most of the segments adorned with a black band along the fore border: opercula none; tymbals whitish with pitchy marks; drums tawny, small, far apart: legs dark tawny; thighs streaked with black; fore-feet, middle-feet and tips of the shanks black; fore-thighs armed with three tawny teeth, whose tips are black, of these two are long and one is short: wings colourless, tawny and partly black at the base, ferruginous along the fore border, slightly tinged with brown at the tips; first and second cross-veins clouded with dark brown, of which there is a slight tinge at the fore end of the third; veins black; flaps

buff and bordered with brown towards the base. Length of the body 25 lines ; of the wings 65 lines.

### 3. *CICADA GIGAS*.

*Cicada gigas*, *Oliv. Enc. Méth.* v. 750, 15, pl. 111, f. 4. *Stoll, Cic.* 84, pl. 22, f. 117.

*a.* St. Lucia. Presented by W. Muter, Esq.

*b, c.* West Indies.

### 4. *CICADA SONANS*, *Mas.*

*Nervus transversus 1us subundatus valdè obliquus, angulum perobtusum fingens, 2o quadruplò ejus longitudine divisus ; 2us subundatus valdè obliquus, angulum perobtusum fingens, 1o paullo longior ; 3us subcurvus, erectus, angulum vix obtusum fingens ; 4us undatus, obliquus, angulum subacutum fingens, 3o multò longior.*

Second marginal areolet full three-fourths of the length of the first : first cross-vein very slightly waved, very slanting, forming an extremely obtuse angle, parted from the second by four times its length ; second very slightly waved, very slanting, forming an extremely obtuse angle, a little longer than the first ; third slightly curved, upright, forming a hardly obtuse angle ; fourth waved, slanting, forming a slightly acute angle, much longer than the third ; fifth curved, nearly upright, forming a hardly acute angle. Body tawny : head a little narrower than the fore-chest : crown adorned with a broad irregular curved black band ; a row of little black bands on each side of the face which is very convex : eyes prominent : mouth tawny with a black tip, reaching the hind-hips : feelers black : borders and sutures of the scutcheon of the fore-chest black ; hind-scutcheon broad, waved and partly edged with black on each side : middle-chest adorned with seven black stripes, of which the second pair join the middle one and include the inner pair ; hind part of the cross-ridge black ; hind border rather deeply excavated : abdomen nearly oval, longer than the chest, covered with pale shining down, mostly black above towards the tip : drums small ; tymbals yellow, marked with black : legs tawny, marked with black which is mostly on the fore-legs ; fore-thighs armed with four teeth of various size : wings colourless, their tips very slightly clouded with brown ; veins black ; first and second cross-veins clouded with brown ; pri-

mitive areolet partly tawny ; fore-flaps tawny ; hind-flaps pale yellow towards the base. Length of the body 24 lines ; of the wings 66 lines.

### 5. CICALA SONORA, Mas.

*Nervus transversus 1us subcurvus, obliquus, angulum valdè obtusum fingens, 2o quadruplò ejus longitudine divisus ; 2us subundatus, valdè obliquus, angulum perobtusum fingens, 1o multò longior ; 3us subundatus, subobliquus, angulum subacutum fingens ; 4us undatus, obliquus, angulum acutum fingens, 1o multò longior.*

Second marginal areolet a little more than two-thirds of the length of the first : first cross-vein very slightly curved, slanting, forming a very obtuse angle, parted from the second by four times its length ; second very slightly waved, very slanting, forming an extremely obtuse angle, much longer than the first ; third very slightly waved, slightly slanting, forming a slightly acute angle ; fourth waved, slanting, forming an acute angle much longer than the first ; fifth curved, nearly upright, forming a slightly acute angle. Body tawny : head a little narrower than the fore-chest, black above ; fore border and hind border of the crown tawny ; face convex : eyes prominent ; scutcheon of the fore-chest marked with black, which forms two partly united triangles in front, and on the hind border a triangle which includes two tawny spots, and has on each side a large spot : hind-scutcheon widened on each side which is slightly angular and partly bordered with black : middle-chest adorned with six black stripes ; the second pair broader than the outer pair, narrower than the inner pair which include a slender black stripe ; behind the latter there is a large black mark which rests on the cross-ridge ; hind border slightly excavated : abdomen obconical, a little longer than the chest, black above with some tawny marks near the base and on each side : legs tawny : wings colourless ; veins green, black towards the tips ; first and second cross-veins clouded with brown ; primitive areolet and fore flaps pale brown ; hind-flaps pale brown towards the base. Length of the body 18 lines ; of the wings 60 lines.

Presented by J. G. Children, Esq.

6. *CICADA RESONANS*, Fem.

*Nervus transversus* 1us subcurvus, valdè obliquus, angulum perobtusum fingens, 2o triplò ejus longitudine divisus; 2us subcurvus, valdè obliquus, angulum perobtusum fingens, 1o paullo longior; 3us undatus, obliquus, angulum subacutum fingens; 4us undatus, obliquus, angulum subacutum fingens, 3o longior.

Second marginal areolet nearly five-sixths of the length of the first: first cross-vein very slightly curved, very slanting, forming an extremely obtuse angle, parted from the second by thrice its length; second slightly curved, very slanting, forming an extremely obtuse angle, a little longer than the first; third waved, slanting, forming a slightly acute angle; fourth waved, slanting, forming a slightly acute angle, longer than the third; fifth curved, nearly upright, forming a hardly acute angle. Body tawny with a ferruginous tinge: head very little narrower than the fore-chest; crown mostly occupied by a broad black band; face slightly convex, partly black: eyes rather prominent: mouth tawny with a black tip, reaching beyond the middle-lips: scutcheon of the fore-chest adorned with a very large obconical black stripe; borders mostly black; hind-scutcheon much widened and slightly waved on each side: middle-chest adorned with six black stripes; the second pair broader than the outer pair, narrower than the inner pair which are obconical: a large slightly cross-shaped black spot rests on the cross-ridge; hind border slightly excavated: abdomen obconical, black above, a little longer than the chest: legs tawny; fore-thighs armed with three teeth of various size: wings colourless; veins tawny; first and second cross-veins clouded with brown; primitive areolet fawn-colour; fore-flaps and the base of the hind-flaps gray with a buff tinge. Length of the body 18 lines; of the wings 56 lines.

7. *CICADA CONSONANS*, Mas.

*Nervus transversus* 1us subcurvus, obliquus, angulum obtusum fingens, 2o plus quinquies ejus longitudine divisus; 2us subcurvus, valdè obliquus, angulum perobtusum fingens, 1o paullo longior; 3us subcurvus, subobliquus, angulum rectum fingens; 4us subundatus, obliquus, angulum subacutum fingens, 3o multò longior.

Second marginal areolet nearly three-fourths of the length of the first: first cross-vein very slightly curved, slanting, forming an

obtuse angle, parted from the second by more than five times its length; second slightly curved, very slanting, forming an extremely obtuse angle, a little longer than the first; third very slightly curved, slightly slanting, forming a right angle; fourth slightly waved, slanting, forming a slightly acute angle, much longer than the third; fifth curved, upright, forming a nearly right angle. Body tawny: head a little narrower than the fore-chest; crown adorned with an irregular and much curved black band; face very convex, with a row of black bands on each side: eyes very prominent: mouth tawny with a black tip reaching the hind-hips; feelers tawny, pitchy towards the base; a short black band on the fore border of the fore-chest and another on the hind border, and between them two short slanting black stripes; hind-scutcheon pale tawny, tinged with green, widened, waved and partly edged with black on each side: middle-chest adorned with seven slender black stripes, the three pairs slanting, the middle one linear, widened at the tip; hind border much excavated: abdomen nearly elliptical, longer and broader than the chest; fore borders of the segments black; a black spot on the first segment: legs tawny, slightly marked with black; fore-thighs armed with three teeth, two large and one small: wings colourless, their tips slightly clouded with brown: veins tawny, darker towards the tips; first and second cross-veins clouded with brown; flaps yellow towards the base. Length of the body 22 lines: of the wings 62 lines.

a. West Coast of America. Presented by Capt. Kellett and Lieut. Wood.

#### 8. *CICADA VIBRANS*, Mas et Fem.

*Nervus transversus* 1us subcurvus, obliquus, angulum valdè obtusum fingens, 2o quadruplò ejus longitudine divisus; 2us subcurvus, obliquus, angulum valdè obtusum fingens, 1i longitudine; 3us subundatus, obliquus, angulum rix acutum fingens; 4us undatus, obliquus, angulum rix acutum fingens, 3o longior.

Second marginal areolet full three-fourths of the length of the first: first cross-vein slightly curved, slanting, forming a very obtuse angle, parted from the second by four times its length; second slightly curved, slanting, forming a very obtuse angle, as long as the first; third slightly waved, slanting, forming a hardly acute angle; fourth waved, slanting, forming a hardly acute angle, longer than the third; fifth curved, nearly upright, forming a hardly acute angle. Body tawny: head a little narrower than the fore-chest;

crown adorned with an irregular and angular black band which includes two tawny spots; face very convex, adorned with two black stripes on each side of which there is a row of little black bands: eyes very prominent: mouth tawny with a black tip, reaching beyond the middle-lips: borders and furrows of the scutcheon of the fore-chest mostly black; hind-scutcheon broad, widened, slightly angular and partly edged with black on each side: middle-chest adorned with some slender black streaks and with a broader stripe whose tip is widened into a short band; hind border rather deeply excavated: abdomen obconical, longer than the chest; fore borders of the segments sometimes black; drums small: legs tawny; fore-feet and tips of the shanks black; a black spot near the tip of each thigh; fore-thighs armed with three teeth, of which two are large and one is small: wings colourless, their tips very slightly tinged with brown; veins black, tawny towards the base: first and second cross-veins clouded with brown. Length of the body 18—23 lines; of the wings 52—57 lines.

*a—d.* ———? Presented by Sir E. Belcher.

### 9. *CICADA SODALIS*, Mas.

*Nervus transversus* 1us *subcurvus*, valdè obliquus, angulum perobtusum fingens, 2o *ferè quadruplò ejus longitudine divisus*; 2us *curvus*, valdè obliquus, angulum perobtusum fingens, 1o *longior*; 3us *subcurvus*, obliquus, angulum subacutum fingens; 4us *curvus obliquus*, angulum subacutum fingens, 3o *longior*.

Second marginal areolet full five-sixths of the length of the second: first cross-vein slightly curved, very slanting, forming an extremely obtuse angle, parted from the second by almost four times its length; second curved, very slanting, forming an extremely obtuse angle, longer than the first; third slightly curved, slanting, forming a slightly acute angle; fourth curved, slanting, forming a slightly acute angle, longer than the third; fifth curved, nearly upright, forming a slightly acute angle. Body dark tawny: head a little narrower than the fore-chest, mostly pitchy above; face convex: eyes very prominent: mouth black, tawny towards the base, reaching nearly to the hind-lips: scutcheon of the fore-chest more or less pitchy; hind-scutcheon widened, angular and edged with black on each side: disk of the middle-chest black with irregular tawny marks or sometimes quite black; hind border rather deeply excavated: abdomen obconical, longer than the chest, pitchy above; hind borders of the segments more or less tawny: legs tawny; thighs, tips of the shanks, fore-shanks and fore-feet black; fore-thighs

armed with three tawny teeth: wings colourless; veins tawny, darker towards the tips; cross-veins from the first to the fourth clouded with brown; primitive areolet pitchy; flaps yellow towards the base. Length of the body 17—20 lines; of the wings 44—48 lines.

*a, b.* ——— ?

#### 10. CÍCADA PLAGA, Mas et Fem.

*Nervus transversus* 1us ferè rectus, valdè obliquus, angulum perobtusum fingens, 2o plus duplò ejus longitudine divisus; 2us subcurvus, valdè obliquus, angulum perobtusum fingens, 1o paullo longior; 3us undatus, obliquus, angulum acutum fingens; 4us subundatus, obliquus, angulum acutum fingens, 3o paullo longior.

Second marginal areolet about five-sixths of the length of the first: first cross-vein almost straight, very slanting, forming an extremely obtuse angle, parted from the second by much more than twice its length; second slightly curved, very slanting, forming an extremely obtuse angle, a little longer than the first; third waved, slanting, forming an acute angle; fourth slightly waved, slanting, forming an acute angle, a little longer than the third; fifth curved, upright, forming a hardly acute angle. Body ferruginous above, tawny beneath; head a little broader than the fore-chest; a broad black band on the crown which is sometimes quite black; face convex, adorned with black bands or quite black: eyes prominent: mouth tawny with a black tip, extending beyond the middle-hips: scutcheon of the fore-chest adorned with black marks which prevail most in the male; hind-scutcheon broad, furrowed across, rounded and slightly widened on each side, darker in the male than in the female, as is also the rest of the body: middle-chest of the male mostly black, of the female adorned with four broad obconical black stripes; hind border slightly excavated: abdomen of the male mostly black above, longer than that of the female; third segment adorned on each side with a large patch of whitish shining down: legs tawny; fore-feet, fore-shanks and middle-shanks mostly black; fore-thighs armed beneath with three teeth: wings colourless; fore border black; veins black, ferruginous towards the base; first and second cross-veins clouded with brown; primitive areolet ferruginous; fore-flaps gray; hind-flaps brown at the base. Length of the body 14—18 lines; of the wings 44—50 lines.

*a—c.* New Holland.



11. *CICADA ARGENTATA*?

*Cicada argentata*? *Germ. Silb. Rev. Ent.* ii. 66, 27.

*Nervus transversus* 1us *subcurvus*, valdè obliquus, angulum perobtusum *figens*, 2o triplò ejus longitudine *divisus*; 2us *subcurvus*, valdè obliquus, angulum perobtusum *figens*, 1o multò *longior*; 3us *undatus*, obliquus, angulum *ferè rectum figens*; 4us *subundatus*, valdè obliquus, angulum *acutum figens*, 3o multò *longior*.

Second marginal areolet about five-sixths of the length of the first: first cross-vein very slightly curved, very slanting, forming an extremely obtuse angle, parted from the second by full thrice its length; second very slightly curved, very slanting, forming an extremely obtuse angle, much longer than the first; third waved, slanting, forming a nearly right angle; fourth very slightly waved, very slanting, forming an acute angle, much longer than the third; fifth curved, upright, forming an acute angle. Body ferruginous: head almost broader than the fore-chest; crown adorned with a broad irregular black band which joins the hind border on each side and in the middle: face tawny, convex but not prominent, with a greenish stripe in the middle, blackish behind and adorned with blackish bands on each side in front: mouth tawny with a black tip, reaching some distance beyond the hind-hips: eyes prominent: feelers ferruginous, sometimes black at the base: scutcheon of the fore-chest adorned with a yellow stripe which has a black stripe on each side; furrows and sides black; hind-scutcheon tawny with a large black spot on each side which is very obtusely angular, the hind side of this angle is nearly straight and about half the length of the fore side, which is very slightly excavated; scutcheon of the middle-chest adorned with four obconical black stripes; middle pair shorter than the outer pair, whose inner sides are much excavated by ferruginous ramifications; between the middle pair there is a slender black streak widening hindward, where it spreads into a cup-shaped spot, and communicates on each side with a black band which runs parallel to the hind border; the latter is very slightly excavated: abdomen obconical, black above, a little longer than the chest; hind borders of the segments sometimes ferruginous; tip adorned with four conical ferruginous marks; under side adorned with three black stripes, one on each side and in the middle a broader one which has a pitchy dot on each side near the tip: legs tawny; hips streaked with black; feet and tips of the shanks pitchy; a broad tawny band on each

foot; tips of the claws black; fore-thighs armed with two rather long sharp tawny teeth whose tips are black: wings colourless, green at the base; veins and fore border green for half the length from the base, black thence to the tips; hind-flaps towards the base and fore-flaps brown with black veins. Length of the body 17—20 lines: of the wings 50—52 lines.

*a.* New South Wales. Presented by Dr. Sinclair.

*b.* New Holland. Presented by R. Hunter, Esq.

*c—e.* New Holland.

## 12. CICADA AULETES.

*Cicada auletes*, *Germ. Silb. Rev. Ent.* ii. 65, 26.

## 13. CICADA ROSA-CORDIS, Fem.

*Nervus transversus* 1us *subcurvus*, valdè obliquus, angulum perobtusum fingens, 2o triplò ejus longitudine divisus; 2us *subcurvus*, valdè obliquus, angulum perobtusum fingens, 1o rix longior; 3us *subcurvus*, subobliquus, angulum subacutum fingens; 4us *subcurvus*, obliquus, angulum acutum fingens, 1o longior.

Second marginal areolet a little shorter than the first: first cross-vein slightly curved, very slanting, forming an extremely obtuse angle, parted from the second by thrice its length; second slightly curved, very slanting, forming an extremely obtuse angle, hardly longer than the first; third very slightly curved, slightly slanting, forming a slightly acute angle; fourth very slightly curved, slanting, forming an acute angle, longer than the third; fifth slightly curved, nearly upright, forming a right angle. Body greenish-tawny, short and broad, clothed with white hairs which are very thick towards the tip of the abdomen: head clothed in front with short black hairs; an irregular black band across the crown; face slightly convex, not at all prominent, dark tawny in front: mouth tawny, with a black tip, reaching the middle-hips: eyes prominent: feelers black: sides of the fore-chest forming very obtuse angles near the base of the fore-wings, very slightly excavated at half the length, rounded on the fore border; hind-scutcheon furrowed, rather broad: scutcheon of the middle-chest adorned on each side with two black marks which proceed from the fore border; the inner pair shorter

and much narrower than the outward pair which are much excavated; hind border pitchy on each side; excavation in the middle rather deep, forming half an ellipse: abdomen pitchy, obconical, a little longer than the chest, greenish-tawny towards the base above: thighs dark ferruginous with black streaks; shanks greenish-tawny with pitchy tips; fore-feet black; middle-feet partly tawny beneath: hind-feet tawny with pitchy tips; claws black, tawny at the base; fore-thighs armed with two black teeth near the tips: wings colourless; fore-wings very bright red at the base and for a short space along the hind border; beyond the red there is a pale yellow band which is tinged with green towards the fore border, and towards the hind border is succeeded by a brown tinge which clouds the hind border for nearly half the length; hind-wings adorned with a broader yellow band, adjoining which there is a brown band; flaps very bright red with brown tips; veins green, tawny towards the tips where they are black; brands, first and second feet partly tawny beneath; claws black, tawny at the base; hind-feet tawny with pitchy tips; fore-thighs armed with two black teeth near the tips: wings colourless; fore-wings very bright, red at the base and for a short space along the hind border; beyond the red there is a pale yellow band which is tinged with green towards the fore border, and towards the hind border is succeeded by a brown tinge which clouds the hind border for nearly half the length; hind-wings adorned with a broader yellow band, adjoining which there is a brown band; flaps very bright red with brown tips; veins green, tawny towards the tips which are black; brands, cross-veins from the first to the fourth, fore border towards the tip, veins adjoining the base of the first cross-vein, and the veins between the second and third cross-veins clouded with brown; fore border greenish-tawny. Length of the body 16 lines: of the wings 48 lines.

a. Brazil? From Mr. Stevens's collection.

#### 14. CICA DA BICOSTA, Fcm.

*Nervus transversus* 1us subcurvus, obliquus, angulum obtusum fingens, 2o quinquies ejus longitudine divisus; 2us subcurvus, obliquus, angulum valde obtusum fingens, 1o longior; 3us subcurvus, obliquus, angulum rectum fingens; 4us undatus, obliquus, angulum subacutum fingens, 3o multò longior.

Second marginal areolet about two-thirds of the length of the first: first cross-vein slightly curved, slanting, forming an obtuse angle, parted from the second by five times its length; second slightly curved, slanting, forming a very obtuse angle, longer than the

first; third slightly curved, slanting, forming a right angle; fourth waved, slanting, forming a slightly acute angle, much longer than the third; fifth curved, nearly upright, forming an almost right angle. Body ferruginous: head narrower than the fore-chest, adorned with an irregular black band which about the middle is widened in front and behind; face convex, adorned in front with a row of little black bands on each side: eyes rather prominent: mouth tawny with a black tip, nearly reaching the hind-hips: scutcheon of the fore-chest adorned with a broad irregular black band which is sometimes interrupted; furrows and side borders black; hind-scutcheon tawny, widened, slightly angular and mere or less tawny on each side: middle-chest adorned with four black obconical stripes, the outer pair much excavated by ferruginous ramifications, much longer than the inner pair; the latter include a black stripe which is much widened near the cross-ridge: hind border slightly excavated: abdomen obconical, a little longer than the chest, black above; hind borders of the segments ferruginous: legs ferruginous; fore-thighs armed with two rather long teeth: wings colourless; fore border tawny as far as the brand, black from thence till near the tip; veins tawny, black towards the tips; hind-flaps at the base and fore-flaps brown. Length of the body 16 lines; of the wings 48 lines.

*b.* -

#### 15. CIDADADA HARRISII.

*Tettigonia Harrisii*, *Leach, Zool. Miscell.* i. 89, pl. 39, f. 1.

*a.* New Holland. Presented by the Entomological Club.

*b*—*h.* New Holland.

#### 16. CICALA FRAXINI.

*Cicala Fraxini*, *Germ. Silb. Rev. Ent.* ii. 64, 23. *Mouff. Ins.* 127. *Aldrov. Ins.* 307. *Matthiol. Diosc.* 264. *Roes. Ins.* ii. pl. 25, f. 4, pl. 26, f. 4, 68. *Reaumur. Ins. Mem.* 5, 151, pl. 16, f. 1, 6. *Geoff. Ins.* i. 429, 1. *Burm. Haub. Ent.* ii. 1, 182, 5. *Tign. Hist. Nat. Ins.* iv. 142. *Leon-Duf. Rech. Hém.* 92, 93, 2, 186. *Amyot et Serr. Hist. Nat. Hém.* 479, 1.

*Cicala plebeia*, *Oliv. Enc. Méth.* v. 754, 33, pl. 112, f. 7. *Scop. Ent. Carn.* 117, 345. *Gmel. Ed. Syst. Nat.* i. 3, 2097, 15. *Lam. Hist. Nat. An. sans vert.* iii. 484, 4. *Lat. Règn Anim.* v. 214.

*Tettigonia Orni*, *Fabr. Ent. Syst.* iv. 23, 23.

*Tettigonia Fraxini*, *Fabr. Syst. Rhyn.* 40, 37.

*Cicada*, *Amyot, Ann. Soc. Ent. fr. 2me Série*, v. 150, 371, f. 56, 57.

*a, b.* South of France. Presented by M. Jaret.

*c.* Italy. Presented by M. A. Pierret.

*d.* Italy. Presented by Dr. Dowler.

*e.* Italy. Presented by M. Goureau.

*f.* South France. Presented by M. Goureau.

*g, h.* South France. Presented by F. Walker, Esq.

*i, j.* South France.

#### 17. *CICADA MÆRENS.*

*Cicada mærens*, *Germ. Silb. Rev. Ent.* ii. 67, 29.

*a, b.* New Holland. Presented by the Earl of Derby.

*c.* New Holland. Presented by Major Gen. Hardwicke.

*d, e.* New Holland. Presented by J. G. Children, Esq.

*f, g.* New Holland.

*h, i.* New South Wales. Presented by Dr. Sinclair.

#### 18. *CICADA CINGULATA.*

*Cicada cingulata*, *Fabr. Ent. Syst.* iv. 21, 17. *Syst. Rhyn.* 38, 25.

*a—g.* New Zealand. Presented by Dr. Sinclair.

*h.* ——— ?

#### 19. *CICADA CURVICOSTA.*

*Cicada curvicosta*, *Germ. Silb. Rev. Ent.* ii. 66, 28.

*Cicada tephrogaster?* *Boisduval, Voy. Astrol.* 611, pl. 10, f. 5.

*a.* New Holland. Presented by the Earl of Derby.

*b—g.* New Holland.

#### 20. *CICADA CONVERGENS*, Fem.

*Nervus transversus* 1us subcurvus, valdè obliquus, angulum perobtusum fingens, 2o plus duplò ejus longitudine divisus; 2us subcurvus, valdè obliquus, angulum perobtusum fingens, 1o paullò longior; 3us subundatus, obliquus, angulum subacutum fingens; 4us ferè rectus, angulum rectum fingens, 3o paullò brevior.

Second marginal areolet about five-sixths of the length of the first: first cross-vein very slightly curved, very slanting, forming an

extremely obtuse angle, parted from the second by more than twice its length; second slightly curved, very slanting, forming an extremely obtuse angle, a little longer than the first; third slightly waved, slanting, forming a slightly acute angle; fourth nearly straight, forming a right angle, a little shorter and less slanting than the third; fifth very slightly curved, nearly upright, forming a hardly obtuse angle. Body black: head a little narrower than the fore-chest; crown adorned with three red spots, one on the hind border, and one on each side; face slightly convex, red with the exception of two black stripes which send forth black bands on each side: mouth tawny with a black tip, reaching the middle-hips: eyes not prominent: feelers black: scutcheon of the fore-chest adorned with a tawny middle stripe, and on each side with three broad red stripes; middle one interrupted; hind-scutcheon tawny, narrow in the middle, widened, tinged with black and almost angular at the base of each fore-wing, excavated on each side: scutcheon of the middle-chest pale red, adorned with three very broad black obconical stripes, the middle one shorter and broader than the side pair, united at the tip to a black spot near the cross-ridge; hind border very slightly excavated: abdomen obconical, a little longer than the chest, adorned with a black stripe, a little black about the base beneath: oviduct pitchy; legs tawny; hips, thighs and fore-shanks striped with black; tips of the shanks, of the feet and of the claws black; fore-feet black; fore-thighs armed with three long tawny teeth: wings slightly tinged with tawny; fore border pale red, pitchy toward the tip; veins black; first and second cross-veins and the longitudinal vein between them clouded with very dark brown. Length of the body 10 lines; of the wings 32 lines.

*a.* New Holland. Presented by the Haslar Hospital.

## 21. CICALA FERRIFERA, Mas et Fem.

*Nervus transversus* 1us subcurvus, obliquus, angulum obtusum fingens, 2o quadruplò ejus longitudine divisus; 2us subcurvus, ferè erectus, angulum subobtusum fingens, 1o paulò brevior; 3us ferè rectus, obliquus, angulum subacutum fingens; 4us ferè rectus, obliquus, angulum vix acutum fingens, 3o longior.

Second marginal arcolelet five-sixths of the length of the first: first cross-vein very slightly curved, slanting, forming an obtuse angle, parted from the second by full four times its length; second very slightly curved, nearly upright, forming a slightly obtuse angle, a little shorter than the first; third nearly straight, slanting, forming a slightly acute angle; fourth nearly straight, slanting, forming

a hardly acute angle, longer than the third; fifth very slightly curved, upright, forming a nearly right angle. Body pale ferruginous: head nearly as broad as the fore-chest, adorned in front with a black band; face very convex, narrow, prominent, almost angular: mouth tawny with a black tip, reaching the middle-hips: eyes prominent: feelers tawny: hind-scutcheon widened and slightly angular on each side: hind border of the scutcheon of the middle-chest slightly excavated: abdomen obconical, longer than the chest: opercula large, close; drums large, half the length of the abdomen, slightly overlapping: legs tawny; tips of the claws black; fore-thighs armed with three sharp tawny teeth, two rather small, the third very small: wings whitish, pale tawny at the base; veins tawny, darker towards the tips. Length of the body 10—13 lines; of the wings 32—36 lines.

*a*—*c*. China. Presented by J. C. Bowring, Esq.

## 22. CICADA BIMACULATA.

*Cicada bimaculata*, *Oliv. Enc. Méth.* v. 756, 46, pl. 113, f. 7.  
*Stoll, Cic.* 91, 37, pl. 24, f. 132. *Germ. Thom, Arch.* ii. 2,  
 84. *Silb. Rev. Ent.* ii. 61, 13.

## 23. CICADA CANICULARIS.

*Cicada canicularis*, *Harris, Ins. New Engl.* 175.

## 24. CICADA DOREI.

*Cicada Dorei*, *Boisd. Voy. Astrolabe*, pl. 10, f. 3.

## 25. CICADA GERMARII.

*Cicada Germarii*, *Guér. Voy. Favorite. Mus. Zool. Ins.* pl. 237,  
 f. 2.

## 26. CICADA GROSSA.

*Cicada grossa*, *Oliv. Enc. Méth.* v. 747, 1. *Lam. Hist. Nat. Anim.*  
*Invert.* iii. 485, 1. *Gmel. Ed. Syst. Nat.* i. 3, 2098, 85.  
*Tettigonia grossa*, *Fabr. Syst. Ent.* 678, 1. *Sp. Ins.* ii. 318, 1.  
*Mant. Ins.* ii. 265, 1. *Ent. Syst.* iv. 16, 1. *Syst. Rhyn.* 33,

27. *CICADA PULVEREA.*

*Cicada pulvereæ*, *Oliv. Enc. Méth.* v. 759, 61, pl. 118, f. 18. *Stoll, Cic.* 58, pl. 14, f. 72.

28. *CICADA FERRUGINEA.*

*Cicada ferruginea*, *Oliv. Enc. Méth.* v. 750, 19, pl. 112, f. 1. *Stoll, Cic.* 65, pl. 16, f. 86.

29. *CICADA DIDYMA.*

*Cicada didyma*, *Boisd. Voy. Astrolabe*, pl. 10, f. 8.

30. *CICADA HIEROGLYPHICA.*

*Cicada hieroglyphica*, *Say.*

31. *CICADA XANTHOGRAMMA.*

*Cicada xanthogramma*, *Germ. Silb. Rev. Ent.* ii. 71, 37.

32. *CICADA DILATATA.*

*Cicada dilatata*, *Oliv. Enc. Méth.* v. 747, 5. *Gmel. Ed. Syst. Nat.* i. 3, 2099, 89.

*Tettigonia dilatata*, *Fabr. Syst. Ent.* 678, 4. *Sp. Ins.* ii. 319, 4. *Mant. Ins.* ii. 266, 5. *Ent. Syst.* iv. 18, 5. *Syst. Rhyn.* 34, 6.

33. *CICADA CONSPURCATA.*

*Cicada conspurcata*, *Oliv. Enc. Méth.* v. 752, 30. *Gmel. Ed. Syst. Nat.* i. 3, 2097, 79.

*Tettigonia conspurcata*, *Fabr. Gen. Ins.* 298. *Sp. Ins.* ii. 320, 13. *Mant. Ins.* ii. 267, 17. *Ent. Syst.* iv. 22, 20. *Syst. Rhyn.* 39, 30.

34. *CICADA KÆMPFERI.*

*Tettigonia Kæmpferi*, *Fabr. Ent. Syst.* iv. 23, 25. *Syst. Rhyn.* 41, 40.



35. *CICADA GUTTATA.*

*Cicada guttata*, *Oliv. Enc. Méth.* v. 751, 24.

36. *CICADA HILARIS.*

*Cicada hilaris*, *Germ. Silb. Rev. Ent.* ii. 69, 34.

37. *CICADA HYALINA.*

*Cicada hyalina*, *Germ. Thon, Arch.* ii. 2, 68. *Silb. Rev. Ent.* ii. 59, 8.

*Tettigonia hyalina*, *Fabr. Ent. Syst. Suppl.* 516, 32. *Syst. Rhyn.* 42, 48.

38. *CICADA COSTALIS.*

*Tettigonia costalis*, *Fabr. Ent. Syst. Suppl.* 516, 23. *Syst. Rhyn.* 39, 34. *Coq. Ill.* 1, pl. 9, f. 2.

39. *CICADA PUSTULATA.*

*Cicada pustulata*, *Oliv. Enc. Méth.* v. 750, 18. *Gmel. Ed. Syst. Nat.* i. 3, 2100, 93.

*Tettigonia pustulata*, *Fabr. Mant. Ins.* ii. 266, 16. *Ent. Syst.* iv. 20, 11. *Syst. Rhyn.* 37, 21.

40. *CICADA FLAVIDA.*

*Cicada flavida*, *Guérin Voy. Ind. Orient. Belanger, Ins.* pl. 3, f. 1.

41. *CICADA GARRULA.*

*Cicada garrula*, *Oliv. Enc. Méth.* v. 758, 55, pl. 113, f. 11. *Stoll, Cic.* 51, pl. 12, f. 59.

42. *CICADA FASCICULATA.*

*Cicada fasciculata*, *Germ. Thon, Arch.* ii. 2, 101. *Silb. Rev. Ent.* ii. 72, 39.

43. *CICADA FESTIVA.*

*Tettigonia festiva*, *Fabr. Syst. Rhyn.* 41, 42.

44. *CICADA CERISYI.*

*Cicada Cerisyi*, *Guér. Icon. Règn. Anim. Texte*, 356.

45. *CICADA CATENA.*

*Cicada catena*, *Oliv. Enc. Méth.* v. 750, 16. *Gmel. Ed. Syst. Nat.* i. 3, 2099, 92.

*Tettigonia catena*, *Fabr. Syst. Ent.* 679, 7. *Sp. Ins.* ii. 319, 7. *Mant. Ins.* ii. 266, 10. *Ent. Syst.* iv. 19, 11. *Syst. Rhyn.* 37, 17.

46. *CICADA CAFRA.*

*Cicada cafra*, *Oliv. Enc. Méth.* v. 758, 57, pl. 113, f. 13. *Stoll, Cic.* 94, pl. 25, f. 136.

47. *CICADA DICHROMA.*

*Cicada bicolor*, *Boisd. Voy. Astrolabe*, pl. 10, f. 7.

48. *CICADA THALASSINA.*

*Cicada thalassina*, *Perchéron, Gen. Ins. Hémipt.* pl. 2. *Guer. Voy. Coq.* 183.

49. *CICADA RUFESCENS.*

*Tettigonia rufescens*, *Fabr. Syst. Rhyn.* 41, 38.

50. *CICADA MARGINATA.*

*Cicada marginata*, *Oliv. Enc. Méth.* v. 755, 37, pl. 113, f. 2. *Stoll, Cic.* 72, pl. 18, f. 100.

*Tettigonia viridis*, *Fabr. Syst. Rhyn.* 39, 28.

*Cicada viridis*, *Germ. Thon, Arch.* ii. 2, 83. *Silb. Rev. Ent.* ii. 61, 12.

51. *CICADA STRUMOSA.*

*Tettigonia strumosa*, *Fabr. Syst. Rhyn.* 34, 7.

52. *CICADA VARIEGATA.*

*Cicada variegata*, *Oliv. Enc. Méth.* v. 757, 50. pl. 113. f. 9, 45.  
*Stoll, Cic.* 96. pl. 25, f. 140.

*Tettigonia variegata*, *Fabr. Ent. Syst. Rhyn.* 37, 16.

53. *CICADA VIRIDICOLLIS.*

*Cicada viridicollis*, *Germ. Thon, Arch.* ii. 2, 91. *Silb. Rev. Ent.*  
 ii. 62, 17.

54. *CICADA VIRIDIS.*

*Cicada viridis*, *Oliv. Enc. Méth.* v. 754, 35, pl. 113, f. 1. *Deg. Ins.*  
 iii. 220, 17, pl. 33, f. 4. *Stoll, Cic.* 89, pl. 23, f. 127.

55. *CICADA SCUTELLATA.*

*Tettigonia scutellata*, *Fabr. Syst. Rhyn.* 44, 58.

56. *CICADA EXHAUSTA.*

*Cicada exhausta*, *Guér. Voy. Coquille, Ins.* pl. 10, f. 6.

57. *CICADA BICONICA*, Fem.

*Nervus transversus* 1us subcurvus, obliquus, angulum obtusum fingens, 2o plus quadruplò ejus longitudine divisus; 2us subcurvus, valdè obliquus, angulum valdè obtusum fingens, 1o longior; 3us subundatus, obliquus, angulum ferè rectum fingens; 4us undatus, obliquus, angulum acutum fingens, 3o multò longior.

Second marginal arcelet more than half the length of the first: first cross-vein very slightly curved, slanting, forming an obtuse angle, parted from the second by much more than four times its length; second slightly curved, very slanting, forming a very obtuse angle; third very slightly waved, slanting, forming an almost right angle;

fourth waved, slanting, forming an acute angle, much longer than the third; fifth curved, nearly upright, forming a hardly acute angle. Body ferruginous above, tawny and powdered with white beneath, partly covered with pale yellow shining down: head a little narrower than the fore-chest; crown adorned with an irregular and interrupted black band; face partly black, very convex: eyes rather prominent: mouth tawny with a black tip, reaching beyond the middle-hips: feelers black, tawny at the base: fore-chest narrower in front; scutcheon adorned with four black stripes; hind-scutcheon pale green, widened, angular and slightly excavated on each side: middle-chest adorned with two obconical pitchy stripes which are united on the fore border and extend about half the length; hind border slightly excavated: abdomen obconical, longer than the chest: legs green with tawny stripes; feet black at the base and at the tips; hind-shanks beset with ferruginous spines; fore-thighs armed with two rather long teeth: wings colourless; fore border green as far as the brand, brown from thence towards the tip; veins green, black towards the tips; first and second cross-veins and tips of first and second longitudinal veins clouded with brown. Length of the body  $13\frac{1}{2}$  lines; of the wings 45 lines.

a. Cuba.

#### 58. *CICADA VIRIDIFASCIA*, Mas et Fem.

*Nervus transversus* 1us subcurvus, obliquus, angulum valdè obtusum fingens, 2o plus triplò ejus longitudine divisus; 2us subcurvus, obliquus, angulum valdè obtusum fingens, 1i longitudine; 3us subcurvus, obliquus, angulum ferè rectum fingens; 4us undatus, obliquus, angulum subacutum fingens, 3o multò longior.

Second marginal areolet full two-thirds of the length of the first: first cross-vein very slightly curved, slanting, forming a very obtuse angle, parted from the second by more than thrice its length; second very slightly curved, slanting, forming a very obtuse angle, as long as the first; third slightly curved, slanting, forming a nearly right angle; fourth waved, slanting, forming a very slightly acute angle, very much longer than the third; fifth slightly curved, erect, forming a right angle. Body tawny: head very little narrower than the fore-chest; crown mostly occupied by a very broad irregular black band; face slightly convex, partly black above: eyes not prominent: mouth tawny with a black tip, reaching the hind-hips: feelers black, tawny at the base: scutcheon of the fore-chest pale green along the fore border, adorned with two black stripes which

are widened in front and behind ; hind-scutcheon broad, pale green, widened at the base of each fore-wing, adorned with a black spot on each side which is excavated : fore part of the middle-chest mostly occupied by four very broad black stripes ; the outer pair much longer than the inner pair, behind the latter are three black spots which are sometimes united ; hind border very slightly excavated : abdomen obconical, a little longer than the chest, partly covered with white down, black above, tawny along the hind borders of the segments of the female : drums rather large, slightly crossing each other ; opercula black, tawny at the base : legs tawny ; fore-thighs armed with three teeth, one large, one of moderate size, and one very small : wings colourless ; fore border tawny for half the length, black from thence till near the tip ; veins tawny ; cross-veins and adjoining parts of the longitudinal veins tawny ; primitive areolet partly brown ; fore-flaps whitish, as are also the hind-flaps at the base. Length of the body 11—12 lines ; of the wings 33—34 lines.

In one case the first cross-vein of the left wing forms a connecting link between the first discoidal areolet and the second marginal areolet.

#### 59. *CICADA SEMILATA*, Mas.

*Nervus transversus* 1us subcurvus, obliquus, angulum valdè obtusum ficiens, 2o quadruplò ejus longitudine divisus ; 2us subcurvus, valdè obliquus, angulum perobtusum ficiens, 1o longior ; 3us subundatus, obliquus, angulum acutum aut ferè rectum ficiens ; 4us rix undatus, obliquus, angulum rix acutum ficiens, 3i longitudine.

Second marginal areolet three-fourths of the length of the first : first cross-vein very slightly curved, slanting, forming a very obtuse angle, parted from the second by about four times its length ; second very slightly curved, very slanting, forming an extremely obtuse angle, longer than the first ; third very slightly waved, slanting, forming a more or less acute angle ; fourth hardly waved, slanting, forming a hardly acute angle, as long as the third ; fifth curved, upright, forming a nearly right angle. In the left wing of an insect of this species the second cross-vein is shorter than the first. Body tawny, tinged with green : head nearly as broad as the fore-chest, adorned with two irregular and interrupted black bands ; face convex : eyes prominent : mouth tawny with a black tip, reaching beyond the hind-bips : fore border of the fore-chest partly black ; hind-

scutcheon of moderate breadth, slightly widened on each side where it is abruptly truncated : hind border of the middle-chest excavated : abdomen obconical, a little longer than the chest : legs tawny ; fore-thighs armed with three small teeth : wings colourless ; veins tawny, partly green, black towards the tips ; primitive areolet and flaps at the base pale tawny. Length of the body 11—12 lines ; of the wings 33—34 lines.

*a, b.* St. Lucia. Presented by W. Muter, Esq.

*c.* Cayenne.

### 60. *CICADA VIRIDIFEMUR*, Mas.

*Nervus transversus lvs subcurvus, obliquus, angulum valdè obtusum fingens, 2o plus triplò ejus longitudine divisus ; 2us subcurvus, obliquus, angulum valdè obtusum fingens, 1o paullò brevior ; 3us ferè rectus, obliquus, angulum subacutum fingens ; 4us undatus, obliquus, angulum acutum fingens, 3o multò longior.*

Second marginal areolet as long as three-fourths of the first : first cross-vein slightly curved, slanting, forming a very obtuse angle, parted from the second by much more than thrice its length ; second slightly curved, slanting, forming a very obtuse angle, a little shorter than the first ; third almost straight, slanting, forming a slightly acute angle ; fourth waved, slanting, forming an acute angle, much longer than the third ; fifth curved, upright, forming a slightly acute angle. Body green, more or less tinged with tawny, partly covered with pale down, powdered beneath with white : head narrower than the fore-chest ; crown adorned with a more or less interrupted black band ; face convex, with a row of little black bands on each side : eyes not prominent : mouth tawny with a black tip reaching a little beyond the hind-hips : feelers black : sutures of the fore-chest blackish ; hind-scutcheon slightly rounded and widened on each side : middle-chest adorned with four stripes, the outer pair ferruginous, black at the base, longer than the inner pair which are black ; hind border rather deeply excavated : abdomen obconical, a little longer than the chest ; fore border of the segments black : drums small : opercula partly white : legs bright green ; thighs striped with black ; feet and tips of shanks pitchy ; fore-thighs armed with two teeth of moderate size : wings colourless ; fore border green at the base, tawny for near half the length, black with the exception of a white band from thence towards the tip ; veins black, tawny or green towards the base ; primitive areolet partly brown ; fore-flaps

brown; hind-flaps brown at the base. Length of the body  $10\frac{1}{2}$  lines; of the wings 32 lines.

a, b. ———?

#### 61. CICADA PASSER, Fem.

*Nervus transversus* 1us subcurvus, obliquus, angulum valdè obtusum fingens, 2o plus quadruplò ejus longitudine divisus; 2us subcurvus, valdè obliquus, angulum perobtusum fingens, 1o paulullò longior; 3us subcurvus, obliquus, angulum subacutum fingens; 4us subundatus, obliquus, angulum subacutum fingens, 3o vix longior.

Second marginal areolet about three-fourths of the length of the first: first cross-vein slightly curved, slanting, forming a very obtuse angle, parted from the second by more than four times its length; second slightly curved, very slanting, forming an extremely obtuse angle, a little longer than the first; third slightly curved, slanting, forming a slightly acute angle; fourth slightly waved, slanting, forming a slightly acute angle, hardly longer than the third; fifth curved, nearly upright, forming an almost right angle. Body green, slightly tinged with tawny, partly covered with pale shining down: head a little narrower than the fore-chest, blackish between the eyelets; face convex, black along the hind border and with a black stripe in front: eyes slightly prominent: mouth green with a black tip, reaching beyond the hind-hips: feelers black: scutcheon of the fore-chest blackish along the fore border; hind-scutcheon a little widened and slightly angular on each side: some indistinct pitchy spots on each side of the middle-chest towards the tip which is slightly excavated: abdomen obconical, hardly longer than the chest: legs green; feet and tips of the shanks tawny; fore-thighs armed with two small teeth: wings colourless; fore border green along near half the length, black thence along one-fourth of the length; veins green, black towards the tips; primitive areolet partly yellow; hind-flaps at the base and fore-flaps pale brown. Length of the body 11 lines; of the wings 36 lines.

a. Venezuela. From Mr. Dyson's collection.

62. *CICADA PASSERCULUS*, Mas.

*Nervus transversus* 1us subcurvus, valdè obliquus, angulum perobtusum fingens, 2o plus triplò ejus longitudine divisus; 2us subcurvus, valdè obliquus, angulum perobtusum fingens, 1i longitudine; 3us ferè rectus, obliquus, angulum rectum fingens; 4us subundatus, obliquus, angulum subacutum fingens, 3o multò longior.

Second marginal areolet about three-fourths of the length of the first: first cross-vein very slightly curved, very slanting, forming an extremely obtuse angle, parted from the second by more than thrice its length; second very slightly curved, very slanting, forming an extremely obtuse angle, as long as the first; third almost straight, slanting, forming a right angle; fourth very slightly waved, slanting, forming a slightly acute angle, much longer than the third; fifth curved, nearly upright, forming a hardly obtuse angle. Body short, green, tinged with tawny: head a little narrower than the fore-chest, adorned with two black bands; face slightly convex: mouth green with a black tip, reaching the hind-hips: eyes not prominent: feelers tawny, black towards the tips: scutcheon of the fore-chest bright green; hind-scutcheon edged with black and very slightly widened on each side: hind border of the middle-chest slightly excavated: abdomen ferruginous, a little shorter than the chest: drums very small: legs green; tips of the shanks and of the feet darker: wings colourless; fore border tawny for half the length, darker from thence towards the tip; veins tawny, black towards the tips. Length of the body 9 lines; of the wings 36 lines.

a. Para. From Mr. Stevens's collection.

63. *CICADA BRIZO*, Fem.

*Nervus transversus* 1us subcurvus, subobliquus, angulum obtusum fingens, 2o quadruplò ejus longitudine divisus; 2us subcurvus, subobliquus, angulum obtusum fingens, 1o longior; 3us subundatus, obliquus, angulum acutum fingens; 4us subundatus, obliquus, angulum acutum fingens, 3o multò longior.

Second marginal areolet about three-fourths of the length of the first: first cross-vein slightly curved, slightly slanting, forming an obtuse angle, parted from the second by full four times its length; second very slightly curved, slightly slanting, forming an obtuse angle, longer than the first; third very slightly waved, slanting, forming an acute angle; fourth slightly waved, slanting, forming



an acute angle, much longer than the third; fifth curved, almost upright, forming a hardly acute angle. Body broad, dark tawny: head and fore-chest dull green: head broad, very little narrower than the fore-chest; face very slightly convex: mouth tawny with a black tip, reaching the hind-lips: eyes prominent: feelers tawny at the base: fore-chest broadest in the middle; two very small pitchy dots on the hind border of the scutcheon; hind scutcheon broad, very convex and beset with short pitchy bristles on each side where it quickly decreases in breadth towards the fore border: some pitchy but very indistinct traces of the usual obconical marks on the scutcheon of the middle-chest; hind border tinged with green, rather deeply excavated: abdomen obconical, a little longer than the chest; last segment long and narrow like a short tail, adorned with two pitchy slightly curved stripes extending half the length from the base; horn at the tip ferruginous: oviduct ferruginous: legs tawny, thighs tinged with green; feet ferruginous; claws black, ferruginous towards the base; fore-thighs near the tip armed with a tawny tooth of moderate size: wings colourless: fore border tawny, tinged with green as far as the brand, pitchy from thence towards the tip; veins tawny, tinged with green in the fore-wings, black towards the tips; primitive areolet partly tinged with green; fore-flaps gray; hind-wings pale brown at the base. Length of the body 16 lines; of the wings 45 lines.

a. ———? Presented by Sir E. Belcher.

#### 64. CICA DA SPINICOSTA, Mas et Fem.

*Nervus transversus 1us subcurvus, valdè obliquus, angulum perobtusum fingens, 2o triplò ejus longitudine divisus; 2us subcurvus, valdè obliquus angulum perobtusum fingens, 1i longitudine; 3us ferè rectus, subobliquus, angulum rix acutum fingens; 4us ferè rectus, obliquus, angulum subacutum fingens, 3o longior.*

Second marginal areolet a little more than three-fourths of the length of the first: first cross-vein very slightly curved, very slanting, forming an extremely obtuse angle, parted from the second by thrice its length: second slightly curved, very slanting, forming an extremely obtuse angle, as long as the first; third almost straight, slightly slanting, forming a hardly acute angle; fourth almost straight, forming a slightly acute angle, longer and more slanting than the third; fifth curved, upright, forming a slightly acute angle. Allied to *C. Serricosta*, but has no black on the chest.

*Male.*—Body olive-green, short and broad, partly clothed with

pale shining hairs: head very short, a little narrower than the fore-chest, adorned above with two broad black bands; face hardly convex, not at all prominent: mouth tawny with a black tip, reaching the hind-hips: feelers black: eyes prominent: fore-chest bright grass-green, narrower in front than behind, black on each side where there is a very obtuse angle near the base of the fore-wing, straight and armed with black spines from thence to the fore border; hind-scutcheon a little broader on each side than in the middle: excavation on the hind border of the scutcheon of the middle-chest broad and very shallow: abdomen slightly obconical, a little narrower but not longer than the chest, ferruginous above with the exception of the base: opercula very small; tymbals whitish; drums very small, far apart: legs green, tinged with tawny; thighs streaked with black; tips of the claws black; fore-thighs armed with two black teeth: wings colourless, green at the base and along the fore border which is armed with black spines; a stout spine at the base of each fore-wing; veins green, black towards the tips.

*Fem.*—Abdomen hardly narrower till near the tip which is slender and obconical, and has a large green spot on each side beneath.

Length of the body 11 lines; of the wings 36—38 lines.

- a. Para. Presented by Gordon Graham, Esq.
- b. Para. Presented by Reginald Graham, Esq.
- c. Brazil. Presented by J. P. G. Smith, Esq.

#### 65. CICA DA MELISA, MAS.

*Nervus transversus* 1us subcurvus, valdè obliquus, angulum valdè obtusum fingens, 2o triplò ejus longitudine dirisus; 2us subcurvus, obliquus, angulum valdè obtusum fingens, 1o paultò brevior; 3us subundatus, obliquus, angulum subacutum fingens; 4us subundatus, obliquus, angulum subacutum fingens, 3o paultò longior.

Second marginal areolet nearly three-fourths of the length of the first: first cross-vein slightly curved, very slanting, forming a very obtuse angle, parted from the second by thrice its length; second slightly curved, slanting, forming a very obtuse angle, a little shorter than the first; third slightly waved, slanting, forming a slightly acute angle; fourth slightly waved, slanting, forming a slightly acute angle, a little longer than the third; fifth curved, upright, forming a slightly acute angle. Body olive-green, partly clothed with pale down, tinged with white beneath: head short, as broad as the fore-chest; face very slightly convex: mouth tawny with a black tip, extending just beyond the hind-hips: eyes rather

prominent: feelers black: fore-chest narrower before than behind; hind-scutcheon tawny, moderately broad, rounded and a little widened at the base of each fore-wing, not excavated on each side: scutcheon of the middle-chest tinged with tawny which is most apparent on each side and on the hind border, the latter is very slightly excavated: abdomen obconical, longer than the chest: opercula none; tymbals hoary; drums pale tawny, slightly tinged with green, rather widely parted: legs green; shanks mostly tawny; feet tawny; tips of the claws black; fore-thighs armed with three teeth, first large, tawny and very oblique; second and third black, second small, third very small; fore-shanks beset beneath with tawny bristles; fore-feet dark tawny: wings colourless; tips of the fore-wings slightly tinged with brown; fore border beset with very short black spines, green, partly tawny, pitchy beyond the band; veins tawny varied with green, black towards the tips, pale yellow towards the base of the hind-wings; primitive areolet mostly tawny; fore-flaps pale grayish brown; hind-flaps tinged at the base with pale grayish brown. Length of the body 12 lines; of the wings 38 lines.

a. Venezuela. From Mr. Dyson's collection.

#### 66. CICADA MELINA, Mas.

*Nervus transversus* 1us subcurvus, subobliquus, angulum obtusum fingens, 2o plus sexties ejus longitudine dirisus; 2us subcurvus, obliquus, angulum valde obtusum fingens, 1o multò longior; 3us subundatus, obliquus, angulum ferè rectum fingens; 4us subcurvus, obliquus, angulum ferè rectum fingens, 3i longitudine.

Second marginal areolet full two-thirds of the length of the first: first cross-vein slightly curved, slightly oblique, forming an obtuse angle, parted from the second by more than six times its length; second slightly curved, oblique, forming a very obtuse angle, much longer than the first; third very slightly waved, oblique, forming an almost right angle; fourth very slightly curved, oblique, forming an almost right angle, as long as the third; fifth curved, nearly upright, forming a hardly acute angle. Body pale tawny, rather broad, tinged with green: head short, broad, hardly narrower than the fore-chest, adorned with two black bands; one on the crown, interrupted, longer than the other which is on the face; this is very slightly convex: mouth tawny with a black tip reaching the hind-hips: feelers black: eyes prominent: fore-chest broadest in the middle, widened into a rounded rim on each side, and adorned with a pitchy spot which extends to the fore border; excavation on the

hind border of the middle-chest moderately deep: abdomen obconical, a little longer than the chest, ferruginous towards the tip: opercula none; tymbals white with a tawny ringlet; drums pale tawny, small, black at the base, but little apart: legs tawny, tinged with green; feet ferruginous; claws black, tawny at the base; fore-thighs armed with two tawny teeth of moderate size, one very oblique, the other more upright and near the tip: wings colourless, adorned with opaline lustre; fore border beset with very little black spines, green as far as the brand, pitchy thence towards the tip: veins tawny, tinged with green, black towards the tips of the fore-wings; primitive areolet bright tawny; fore-flaps pale brown; hind-flaps pale brown at the base and for a space along the hind border. Length of the body 13 lines; of the wings 42 lines.

#### 67. CICADA MESOCHLORA, Mas.

*Nervus transversus* *lus curvus*, *subobliquus*, *angulum obtusum* *figens*, *2o plus quadruplè ejus longitudine divisus*; *2us valdè curvus*, *subobliquus*, *angulum subobtusum* *figens*, *1o paullo longior*; *3us fere rectus*, *obliquus*, *angulum vix acutum* *figens*; *4us subcurvus*, *obliquus*, *angulum subacutum* *figens*, *3o multò longior*.

Second marginal areolet much more than half the length of the first: first cross-vein curved, slightly slanting, forming an obtuse angle, parted from the second by more than four times its length; second much curved, slightly slanting, forming a slightly obtuse angle, a little longer than the first; third nearly straight, slanting, forming a hardly acute angle; fourth very slightly curved, slanting, forming a slightly acute angle, much longer than the third; fifth slightly curved, almost upright, forming a nearly right angle. Body tawny, clothed with whitish shining down: head a little narrower than the fore-chest; crown adorned with an irregular and interrupted black band; face convex, rather prominent, adorned in front with two black stripes which unite and inclose an oval space and then diverge: mouth tawny with a black tip, reaching the hind-hips: eyes prominent: feelers black: scutcheon of the fore-chest tinged with green, adorned in the middle with two slender black nearly parallel stripes; furrows blackish; hind-scutcheon green, widened near the base of each fore-wing into a very obtuse and slightly rounded angle whose fore side is twice the length of its hind-side and very slightly excavated: scutcheon of the middle-chest adorned with four brown stripes; the inner pair short, obconical, suc-

ceeded by a brown cross ; the outer pair longer but irregular ; hind border very slightly excavated : abdomen elliptical, a little broader and longer than the chest : opercula large, tawny, partly pitchy ; drums tawny, large, not far apart, rather less than half the length of the abdomen : legs pale tawny ; tips of the shanks and of the claws black ; fore-feet and middle-feet blackish with tawny bands ; fore-thighs armed with two tawny teeth whose tips are black, of these one is stout, the other oblique and more slender : wings colourless, adorned with delicate blue lustre, tawny along the fore border ; veins pale tawny, tinged with green, darker towards the tips ; first and second cross-veins tinged with pale brown ; three indistinct brown dots near the tip, the indications of a row of spots along the hind border ; fore-flaps pale brown ; hind-flaps pale tawny at the base and for a short space along the hind border. Length of the body 11 lines ; of the wings 34 lines.

*a.* Jamaica. From Mr. Gosse's collection.

#### 68. *CICADA SERRICOSTA* ?

*Cicada serricosta* ? *Germ. Silb. Rev. Ent.* ii. 62, 18. Mas et Fem.

*Nervus transversus* 1us subcurvus, obliquus, angulum obtusum fingens, 2o quadruplò ejus longitudine divisus ; 2us curvus, obliquus, angulum obtusum fingens, 1i longitudine ; 3us subcurvus, obliquus, angulum subrectum fingens ; 4us subundatus, angulum acutum fingens, 3o longior et obliquior.

Second marginal areolet about two-thirds of the length of the first : first cross-vein very slightly curved, slanting, forming an obtuse angle, parted from the second by full four times its length ; second curved, slanting, forming an obtuse angle, as long as the first ; third very slightly curved, slanting, forming a nearly right angle ; fourth very slightly waved, forming an acute angle, longer and more slanting than the third ; fifth curved, nearly upright, forming a slightly acute angle.

*Male*.—Body tawny, tinged with green : head nearly as broad as the fore-chest ; a black interrupted band across the crown and between the eyelets ; face convex, adorned in front with two black stripes which send forth black bands on each side : mouth tawny with a black tip, reaching the hind-hips : eyes not prominent : feelers black : furrows of the scutcheon of the fore-chest blackish ; hind-scutcheon slightly widened and forming an obtuse angle at the base of each fore-wing, nearly straight and beset with short black bristles on each side : scutcheon of the middle-chest adorned with four marks ;

inner pair black, obconical ; a large black spot between them on the cross-ridge ; outer pair longer, ferruginous, black at the base ; hind border slightly excavated : abdomen obconical, mostly ferruginous, covered here and there with whitish down ; fore borders of the segments mostly black : opercula none ; tymbals whitish with brown bands ; drums tawny, very small, pitchy at the base : legs yellow ; hips and thighs adorned with pitchy stripes ; tips of the shanks pitchy ; feet pitchy, a yellow band on each fore middle-foot and hind-foot ; fore-thighs armed with three tawny teeth, one very short, the other of moderate size : wings colourless ; a pitchy spot on the fore border of the primitive areolet ; fore border tawny, beset with short black spines, yellow at the base ; a yellow band beyond the brand, beyond which band the border is pitchy ; veins black, tawny towards the base ; fore-flaps brown ; hind-wings pale brown at the base ; flaps pale brown at the base and along the fore border.

*Fem.*—A black dot on each side of the black spots near the cross-ridge of the scutcheon of the middle-chest which has two black spots on the hind border : abdomen a little longer than the chest, compressed at the tip, black on each side of the base : a green spot at the base of each fore-wing.

Length of the body 8—11 lines ; of the wings 27—36 lines.

*Var. β.* Abdomen pitchy.

*Var. γ.* Fore border of the wings green at the base.

*a.* Para. Presented by Gordon Graham, Esq.

*b.* British Guiana. From Sir R. Schomburghk's collection.

*c.* Demerara.

*d--g.* Brazil ?

## 69. CICA DA BRISA, Fem.

*Nervus transversus* 1us subcurvus, obliquus, angulum obtusum fingens, 2o quadruplò ejus longitudine divisus ; 2us subcurvus, valdè obliquus, angulum perobtusum fingens, 1o multò longior ; 3us subundatus, obliquus, angulum subacutum fingens ; 4us subundatus, obliquus, angulum subacutum fingens, 3o multò longior.

Second marginal areolet about two-thirds of the length of the first : first cross-vein very slightly curved, slanting, forming an obtuse angle, parted from the second by four times its length ; second very slightly curved, very slanting, forming an extremely obtuse angle, much longer than the first ; third slightly waved, slanting, forming a hardly acute angle ; fourth slightly waved, slanting, forming a slightly acute angle, very much longer than the third ; fifth

curved, upright, forming a slightly acute angle. Body dark tawny, tinged with green, short, broad, partly clothed with shining tawny down: head short, broad, a little narrower than the fore-chest, adorned with a black band across the eyelets; face slightly convex, adorned on the disk with three black spots: mouth tawny with a black tip, reaching near to the hind-hips: eyes not prominent: feelers black: fore-chest much narrower in front than behind; scutcheon adorned with two rather large black spots on the fore border, and with three small united black spots on the hind border; hind-scutcheon dark green, rather broad, very slightly waved along the hind border, forming a very obtuse angle above the base of the fore-wing near which it is beset with some short black bristles, hardly indented on each side: scutcheon of the middle-chest adorned in front with four black stripes; outer pair obconical; inner pair much shorter, nearly forming two semicircles; two black dots near the cross-ridge: hind border rather deeply excavated: abdomen obconical, a little shorter than the chest, adorned with black which is chiefly on the fore borders of the segments, and forms two very irregular curved stripes, these are united at the tip: on the under side the black rather assumes the appearance of three bands, one at the base, one in the middle, and one at the tip: legs tawny, tinged with green, partly ferruginous; feet black; fore-shanks tawny; claws black, tawny at the base; hind-feet tawny, pitchy at the tips and at the base; fore-thighs armed with two ferruginous teeth of moderate size: wings colourless, brown at the base and on the primitive areolet; fore border ferruginous in front and black behind as far as the band, black in front and ferruginous behind from thence towards the tip; veins black, green towards the base in the fore-wings, tawny towards the base in the hind-wings. Length of the body 12 lines; of the wings 43 lines.

a. British Guiana. Presented by Sir R. Schomburgk.

#### 70. CICA DA LACRINES, Fem.

*Nervus transversus* <sup>1</sup>*lus subcurvus*, valdè obliquus, angulum perobtusum *figens*, 2o plus duplò ejus longitudine *divisus*; 2us *subcurvus*, obliquus, angulum valdè obtusum *figens*, 1o brevior; 3us *subundatus*, obliquus, angulum acutum *figens*; 4us *ferè rectus*, obliquus, angulum subacutum *figens*, 3o paullo longior.

Second marginal areolet more than two-thirds of the length of the first: first cross-vein very slightly curved, very slanting, forming an extremely obtuse angle, parted from the second by more than

twice its length; second slightly curved, slanting, forming a very obtuse angle, shorter than the first; third very slightly waved, slanting, forming an acute angle; fourth nearly straight, slanting, forming a slightly acute angle, a little longer than the third; fifth curved, upright, forming a slightly acute angle. Body tawny, short, broad, tinged with green: head broad, very short, a little narrower than the fore-chest; crown adorned with a black band; face very short above, adorned with a black band which extends as far as the base of each eye: mouth tawny with a black tip, reaching the hind-hips: eyes not prominent: feelers black: fore-chest not shining, narrower in front than behind; scutcheon mostly green, with a narrow black band along the fore border; hind-scutcheon rather broad, very slightly excavated on the hind border, forming a very obtuse angle above the base of each fore-wing, adorned with a black border from each angle to each fore side: middle-chest and abdomen shining: middle-chest dark tawny; hind border very slightly excavated: abdomen ferruginous, obconical, hardly longer than the chest, adorned with a patch of white shining down on each side; last segment somewhat pitchy beneath, adorned with a very large tawny spot on each side: legs tawny; thighs striped with black; feet ferruginous: claws black, ferruginous at the base; fore-thighs armed with three long ferruginous oblique teeth: wings colourless; wing-ribs and veins ferruginous, the latter black towards the tips; primitive areolet tawny; fore-flaps brownish tawny; hind-wings pale brown at the base. Length of the body 12 lines; of the wings 38 lines.

#### 71. CICADA PANYASES, MRS.

*Nervus transversus* 1us curvus, valdè obliquus, angulum perobtusum fingens, 2o quadruplò ejus longitudine divisus; 2us subcurvus, obliquus, angulum valdè obtusum fingens, 1o viâ brevior; 3us subundatus, obliquus, angulum subacutum fingens; 4us subundatus, obliquus, angulum subacutum fingens, 3o longior.

Second marginal areolet more than two-thirds of the length of the first: first cross-vein curved, very slanting, forming an extremely obtuse angle, parted from the second by four times its length; second slightly curved, slanting, forming a very obtuse angle, nearly as long as the first; third very slightly waved, slanting, forming a very slightly acute angle; fourth very slightly waved, slanting, forming a very slightly acute angle, longer than the third; fifth curved, upright, forming a slightly acute angle. Body tawny, tinged with



green, clothed above with whitish shining down, powdered with white beneath: head a little narrower than the fore-chest; crown adorned with a black interrupted band which by the eyelets sends forth two branches nearly to the hind border; face slightly convex adorned with a broad black band along its hind border: mouth tawny with a black tip, reaching a little beyond the hind-hips: eyes rather prominent: feelers black: fore-chest rather short; scutcheon blackish along the fore border, adorned with a short black stripe on the hind border; hind-scutcheon green, rather narrow, rounded but hardly widened above the base of each fore-wing, not excavated but beset with a few short black bristles on each side: scutcheon of the middle-chest adorned with four obconical dark ferruginous stripes; middle pair not more than half the length of the outer pair; hind border slightly excavated: abdomen obconical, ferruginous, a little longer, and very little broader than the chest: opercula none; tymbals whitish; drums pale yellow, very small, far apart, black on each side towards the base: legs tawny; feet ferruginous with pitchy tips; claws black, tawny at the base; fore-thighs marked with black, armed with one tawny tooth near the tip; wings colourless: fore border greenish tawny as far as the braud, pitchy thence towards the tip: veins black, green towards the base in the fore-wings, tawny towards the base in the hind-wings; primitive arcelet tawny; fore-flaps brown; hind-wings brown at the base. Length of the body 11 lines; of the wings 36 lines.

a. British Guiana. Presented by Sir R. Schomburghk.

## 72. CICA DA PIDYTES, MRS.

*Nervus transversus 1us curvus, obliquus, angulum valdè obtusum fingens, 2o plus quadruplò ejus longitudine divisus; 2us curvus, obliquus, angulum valdè obtusum fingens, 1o vix longior; 3us subundatus, obliquus, angulum subacutum fingens; 4us subundatus, obliquus, angulum subacutum fingens, 3o paullo brevior.*

Second marginal arcelet about two-thirds of the length of the first: first cross-vein curved, slanting, forming a very obtuse angle, parted from the second by more than four times its length; second curved, slanting, forming a very obtuse angle, hardly longer than the first; third slightly waved, slanting, forming a slightly acute angle: fourth slightly waved, slanting, forming a slightly acute angle, a little shorter than the third; fifth curved, upright, forming a slightly acute angle. Body green, slightly tinged with tawny: head nearly as broad as the fore-chest, adorned with an irregular

black band which is much interrupted on each side of the eyelets ; face very slightly convex, adorned above with a short broad black band which is interrupted by a triangular tawny spot and is accompanied by a black spot on each side at the base of the feelers ; furrows partly blackish on each side : mouth tawny with a black tip, extending to the hind border of the drums : feelers tawny, black towards the tips : eyes hardly prominent : fore-chest a little narrower in front than behind : scutcheon adorned with four little brown spots, two in front and two behind ; spaces between the furrows partly tawny ; hind-scutcheon of moderate breadth, very slightly excavated in the middle, rounded but hardly widened above the base of each fore-wing, not excavated on each side : scutcheon of the middle-chest adorned with four large obconical tawny stripes, the outer pair about twice the length of the inner pair ; excavation of the hind border moderately deep : abdomen obconical, a little longer than the chest : opercula none ; tymbals white, tawny on the inner side ; drums small, pale tawny, hardly apart : legs tawny ; thighs and hind-shanks mostly green ; tips of the claws black ; fore-thighs armed with two tawny teeth of moderate size, the first very oblique : wings colourless ; fore border green, ferruginous beyond the brand, beset with very short ferruginous spines ; veins of the fore-wings green, of the hind-wings tawny, black towards the tips : primitive areolet partly tawny ; fore-flaps tawny ; hind-flaps tawny at the base and for a short space along the middle-vein. Length of the body 10 lines ; of the wings 34 lines.

### 73. CICADA PHYSCOA, Mas.

*Nervus transversus* Ius curvus, obliquus, angulum valdè obtusum fingens, 2o plus quadruplè ejus longitudine divisus ; 2us subcurvus, obliquus, angulum valdè obtusum fingens, 1i longitudine ; 3us subundatus, obliquus, angulum vix acutum fingens ; 4us subundatus, obliquus, angulum subacutum fingens, 3o paullò longior.

Second marginal areolet more than two-thirds of the length of the first : first cross-vein curved, slanting, forming a very obtuse angle, parted from the second by more than four times its length ; second slightly curved, slanting, forming a very obtuse angle, as long as the first ; third very slightly waved, slanting, forming a hardly acute angle ; fourth very slightly waved, slanting, forming a slightly acute angle, a little longer than the third ; fifth curved, upright, forming a slightly acute angle. Body tawny, tinged with green : head nearly as broad as the fore-chest, adorned with a slen-

der and much interrupted band; face slightly convex, adorned on the hind border with a broad black indented band: mouth tawny with a black tip, reaching a little beyond the hind-hips: feelers black: eyes hardly prominent: fore-chest narrower in front than behind; scutcheon adorned with an interrupted black band along the fore border; hind-scutcheon green, slightly concave on the hind border, rounded and a little widened above the base of each fore-wing, beset with short spines but not excavated on each side: scutcheon of the middle-chest adorned with four large obconical ferruginous stripes, the outer pair twice the length of the inner pair whose borders are partly pitchy; excavation of the hind border moderately deep: abdomen obconical, a little longer than the chest, somewhat ferruginous, especially towards the tip; opercula very small, narrow, angular; tymbals tawny; drums small, tawny, their disks green: legs tawny, tinged with green; claws black, tawny at the base; fore-thighs striped beneath with black, armed with two ferruginous teeth, the first very oblique: wings colourless; fore border tawny as far as the brand which is pitchy; veins tawny, black towards the tips. Length of the body 12 lines; of the wings 35 lines.

a. ——— ?

#### 74. CICADA BRAURE, Mas.

*Nervus transversus 1us subcurvus, ferè erectus, angulum obtusum fingens, 2o plus quinquies ejus longitudine dirisus; 2us subcurvus, valdè obliquus, angulum perobtusum fingens, 1o paullo longior; 3us subundatus, obliquus, angulum subacutum fingens; 3o paullo longior.*

Second marginal areolet more than two-thirds of the length of the first: first cross-vein very slightly curved, nearly upright, forming an obtuse angle, parted from the second by more than five times its length; second slightly curved, very slanting, forming an extremely obtuse angle, a little longer than the first; third very slightly waved, slanting, forming a slightly acute angle; fourth very slightly waved, slanting, forming a slightly acute angle, a little longer than the third; fifth curved, upright, forming a slightly acute angle. Body green, tinged with tawny, partly clothed with shining pale yellow down: head as broad as the fore-chest, adorned with a pitchy stripe which passes between the eyelets: face slightly convex, adorned with a pitchy band: mouth tawny with a black tip, extending just beyond the hind-hips: feelers black, tawny at the base: eyes prominent: hind-scutcheon of the fore-chest rather narrow in the middle, slightly concave on the hind border, widened and almost

angular above the base of each fore-wing, not indented on each side; scutcheon of the middle-chest adorned with indistinct traces of ferruginous stripes; hind border moderately excavated: abdomen obconical, hardly longer than the chest: opercula none; tymbals whitish; drums pale green, of moderate size, nearly meeting, less than one-third of the length of the abdomen: legs green, tinged with tawny; feet dark tawny with pitchy tips; claws dark tawny with black tips: fore-thighs armed with three tawny teeth, first large, oblique, second small, third very small; fore-shafts beset beneath with tawny bristles: wings colourless; tips of the fore-wings tinged with brown; fore border green, varied with tawny, pitchy beyond the band, beset with very short spines; veins black, green towards the base of the fore-wings, tawny towards the base of the hind-wings; primitive areolet tawny; fore-flaps ferruginous: hind-flaps ferruginous at the base and for a short space along the hind border and along the borders of the veins. Length of the body 10 lines; of the wings 35 lines.

a. Para. Presented by Reginald Graham, Esq.

#### 75. CICADA ORNEA, M&S.

*Nerrus transversus* 1us *subcurvus*, *subobliquus*, *angulum subobtusum* *figens*, 2o *quinquies ejus longitudine divisus*; 2us *subcurvus*, *obliquus*, *angulum valdè obtusum figens*, 1o *longior*; 3us *subcurvus*, *subobliquus*, *angulum rectum figens*; 4us *undatus*, *valdè obliquus*, *angulum acutum figens*, 3o *plus duplò longior*.

Second marginal areolet much less than two-thirds of the length of the first: first cross-vein slightly curved, slightly slanting, forming a slightly obtuse angle, parted from the second by five times its length; second slightly curved, slanting, forming a very obtuse angle, longer than the first; third very slightly curved, slightly slanting, forming a right angle; fourth waved, very slanting, forming an acute angle, more than twice the length of the third; fifth curved, nearly upright, forming a hardly acute angle. Body black: head a little narrower than the fore-chest, adorned on the hind border with a middle tawny triangular mark and with a forked mark on each side; on each side in front are two tawny marks and between at the base of the feelers a green mark; face convex, adorned with tawny bands on each side: mouth tawny with a black tip, reaching the hind-hips: eyes rather prominent: feelers black, partly ferruginous: scutcheon of the fore-chest adorned on each side with two broad tawny stripes which are irregular in outline and partly exca-

vated, and contain several small black spots; hind-scutcheon adorned along the hind border with a greenish tawny band which is interrupted at the base of each fore-wing, rather narrow in the middle, slightly waved along the hind border, much widened and almost angular near the base of each fore-wing, slightly indented on each side: scutcheon of the middle-chest adorned with several tawny marks; a middle pair curved and widened at one end; a net-work mark on each side, and an oblique stripe near each side of the chest; two tawny spots above the cross-ridge which is tawny and has a pitchy spot in the middle; hind border tawny, very slightly excavated: breast tawny: abdomen pitchy, obconical, a little longer than the chest: opercula large, close, reddish-pitchy; drums pale yellow, large, triangular, more than half the length of the abdomen: legs tawny; thighs striped beneath with pale yellow; claws black, tawny at the base; fore-thighs armed with two tawny teeth of moderate size; fore-shanks and fore-feet pitchy; hind-shanks and hind-feet pale yellow: wings colourless; fore border green, tinged with tawny as far as the brand, pitchy from thence towards the tip; brands pitchy; veins black, tawny and green towards the base; first and second cross-veins slightly clouded with brown; fore-flaps grayish brown; hind-flaps grayish brown at the base and along the veins. Length of the body 10 lines; of the wings 32 lines.

a. Mexico. Presented by J. Taylor, Esq.

#### 76. CICADA DIUPSILON, Fem.

*Nervus transversus* 1us subcurvus, subobliquus, angulum valdè obtusum fingens, 2o plus duplè ejus longitudine divisus; 2us subcurvus, obliquus, angulum obtusum fingens, 1o brevior; 3us ferè rectus, obliquus, angulum ferè rectum fingens; 4us subcurvus, obliquus, angulum ferè rectum fingens, 3o longior.

Second marginal areolet more than two-thirds of the length of the first: first cross-vein very slightly curved, very slanting, forming a very obtuse angle, parted from the second by much more than twice its length; second very slightly curved, slanting, forming an obtuse angle, shorter than the first; third nearly straight, slanting, forming a nearly right angle; fourth slightly curved, slanting, forming an almost right angle, longer than the third; fifth curved, nearly upright, forming a hardly acute angle. Body tawny: head narrower than the fore-chest; crown black with the exception of two slender irregular tawny bands, one on the fore border, the other on the hind border; these bands are here and there widened into small spots; face convex, not prominent, with a yellow spot and partly

black above, adorned in front with two black stripes which send forth black bands on each side: mouth tawny with a black tip, reaching the hind-hips: eyes prominent: feelers tawny, pitchy at the base: fore-chest rather short, narrower before than behind; scutcheon adorned in the middle with two pitchy stripes which are widened before and behind; furrows dark tawny; hind-scutcheon rather narrow, much widened at the base of each fore-wing, very slightly excavated on each side: scutcheon of the middle-chest adorned with four large obconical pitchy stripes; outer pair much longer than the inner pair, mostly ferruginous towards the tips; inner pair excepting the base bordered with pale tawny which forms a double U figure; sides and hind border tawny, the latter slightly excavated: abdomen pitchy, obconical, shorter than the chest; hind borders of the segments tawny; last segment adorned with a tawny middle stripe and with two forked tawny side stripes: oviduct pitchy: legs tawny; thighs streaked with brown; feet pitchy; claws black, tawny at the base; fore-thighs armed with two long pitchy teeth; fore-shanks dark tawny, rather hairy: wings colourless; veins tawny, marked with black at the base, black towards the tips; fore border tawny as far as the brand, pitchy from thence till near the tip; primitive areolet buff; fore-membrane grayish; flaps buff towards the base. Length of the body 9 lines; of the wings 28 lines.

a. British Guiana. Presented by Sir R. Schomburghk.

#### 77. CICA DA CUTA, Fem.

*Nervus transversus 1us subcurvus, obliquus, angulum valdè obtusum fingens, 2o quadruplò ejus longitudine divisus; 2us subcurvus, obliquus, angulum obtusum fingens, 1o brevior; 3us ferè rectus, obliquus, angulum rix acutum fingens; 4us subundatus, obliquus angulum subacutum fingens, 3o multò longior.*

Second marginal areolet about two-thirds of the length of the first: first cross-vein slightly curved, slanting, forming a very obtuse angle, parted from the second by full four times its length; second slightly curved, slanting, forming an obtuse angle, shorter than the first; third nearly straight, slanting, forming a hardly acute angle: fourth very slightly waved, slanting, forming a slightly acute angle, much longer than the third; fifth curved, upright, forming a right angle. Body tawny, rather short and broad: head a little narrower than the fore-chest; face convex, not prominent, adorned with a short black stripe: an irregular black stripe across the crown: mouth tawny with a black tip, reaching a short distance beyond the

hind-hips: eyes prominent: feelers black: fore-chest rather short: scutcheon adorned with two parallel black stripes which are united on the fore border and on the hind border; inner furrows blackish; hind-scutcheon widened and forming an obtuse angle at the base of each fore-wing, not excavated but nearly straight on each side: scutcheon of the middle-chest adorned with four black obconical stripes, the inner pair much shorter than the outer pair, united at the base, succeeded by two black spots which are close to the cross-ridge; hind border rather deeply excavated: abdomen pale ferruginous, obconical, very little longer than the chest; a broad black band adjoining the fore border of each segment from the first to the fifth; under side of the last segment adorned with a black middle stripe and with a large tawny spot on each side; oviduct pitchy; legs tawny; claws above partly black; fore-thighs armed with one long tawny tooth: wings colourless; veins black, tawny towards the base; fore border tawny as far as the brand, pitchy from thence towards the tip; a yellow spot a little beyond the brand which is pitchy; primitive areolet pale tawny: fore-membrane pale brown; flaps brown at the base, along the fore border, and along the black middle-vein. Length of the body 8 lines; of the wings 26 lines.

#### 78. CICADA LUCASTIA, Mas.

*Nervus transversus* 1us subcurvus, obliquus, angulum obtusum fingens, 2o plus quadruplò ejus longitudine dirisus; 2us curvus, valdè obliquus, angulum valdè obtusum fingens, 1o longior; 3us ferè rectus, obliquus, angulum subacutum fingens; 4us subundatus, obliquus, angulum acutum fingens, 3o multò longior.

Second marginal areolet about two-thirds of the length of the first: first cross-vein slightly curved, slanting, forming an obtuse angle, parted from the second by much more than four times its length; second curved, very slanting, forming a very obtuse angle, longer than the first; third nearly straight, slanting, forming a slightly acute angle; fourth very slightly waved, slanting, forming an acute angle, very much longer than the third; fifth curved, nearly upright, forming a hardly acute angle. Body ferruginous, tawny and powdered with white beneath; head nearly as broad as the fore-chest, adorned with a very broad irregular black band which sends forth branches round the eyes and to the hind border; face slightly convex, not at all prominent, adorned with a broad black band; furrows in front black: mouth tawny with a black tip, reach-

ing a little beyond the hind-hips: eyes rather prominent: feelers black: fore-chest rather short, narrower in front than behind; scutcheon mostly black along the fore border and the hind border and in the furrows; hind-scutcheon tawny, mostly pitchy along the fore border, widened and forming a very obtuse angle near the base of each fore-wing, very slightly excavated on each side: scutcheon of the middle-chest rather long, adorned with four broad black stripes, the outer pair are obconical till near their tips and then much widened; the side pair are much shorter, almost united, and are succeeded by a large slightly cross-shaped black spot which rests on the fore-side of the cross-ridge; excavation on the hind border rather deep: abdomen obconical, very little longer than the chest; segments mostly black above with the exception of the sides and of the hind borders: opercula none; tymbals tawny; drums small, tawny, blackish at the base and on the inner side, parted by a narrow interval: legs tawny; claws black, tawny at the base; fore-thighs armed with two teeth; one small, yellow, near the base; the other long, tawny towards the tip; wings colourless, with a pitchy spot beneath the fore border at the base adjoining the primitive areolet; veins black, tawny towards the base; fore border beset with very short spines, tawny as far as the pitchy brand, pitchy towards the tip with the exception of a tawny spot which is a little beyond the brand; fore-membranes brownish tawny; flaps brownish tawny at the base, on the fore borders and along the black middle-vein. Length of the body  $7\frac{1}{2}$  lines; of the wings 25 lines.

a. ——— ?

#### 79. CICADA ASIUS, Mas.

*Nervus transversus* 1us subcurvus, valde obliquus, angulum valde obtusum fingens, 2o plus triplò ejus longitudine divisus; 2us subcurvus, valde obliquus, angulum valde obtusum fingens, 1o paullò longior; 3us ferè rectus, subobliquus, angulum subacutum fingens; 4us subcurvus, obliquus, angulum subacutum fingens, 3o multo longior.

Second marginal areolet about two-thirds of the length of the first: first cross-vein slightly curved, very slanting, forming a very obtuse angle, parted from the second by much more than thrice its length; second very slightly curved, very slanting, forming a very obtuse angle, a little longer than the first; third nearly straight, slightly slanting, forming a slightly acute angle; fourth slightly curved, slanting, forming a slightly acute angle, much longer than the third; fifth very slightly curved, upright, forming a right



angle. Body black, short and broad, tawny beneath: head a little narrower than the fore-chest, adorned with a red spot on each side of the hind border, and with another on each side of the face; the latter slightly convex, not at all prominent, adorned in front with red ridges: feelers black: mouth tawny with a black tip, reaching the hind-hips: eyes rather prominent: fore-chest a little narrower in front than behind; scutcheon adorned with a dark red spot on the fore side of each inner furrow; hind-scutcheon tawny, very slightly rounded and forming an obtuse angle and adorned with a black spot near the base of each fore-wing: scutcheon of the middle-chest adorned with two slender slightly oblique tawny stripes; sides and hind border tawny, the latter very slightly excavated: cross-ridge tawny with the exception of a black spot on its disk: abdomen obconical, very little longer than the chest; tip and hind borders of the segments dark red: opercula none; tymbals hoary; drums small, dark tawny, very little apart: legs tawny; thighs adorned with pitchy streaks; feet ferruginous; claws black, ferruginous at the base; fore-thighs adorned with two ferruginous teeth, one of moderate size, the other very small; hind-shanks beset with ferruginous spines; wings colourless; an indistinct tawny tinge at the tip of each fore-wing; veins tawny, black towards the tips; fore border tawny, pitchy from the brand towards the tip; fore-membrane pale tawny; flaps pale brown at the base and along part of the hind border. Length of the body 7 lines; of the wings 21 lines.

a. ——— ?

#### 80. *CICADA SEMICINCTA*, Mas.

*Nervus transversus* 1us subcurvus, subobliquus, angulum obtusum fignens, 2o plus quadruplò ejus longitudine divisus; 2us fere rectus, obliquus, angulum valdè obtusum fignens, 1o multò longior; 3us vix undatus, subobliquus, angulum subacutum fignens; 4us vix undatus, subobliquus, angulum vix acutum fignens, 3o longior.

Second marginal areolet nearly three-fourths of the length of the first: first cross-vein very slightly curved, very slightly slanting, forming an obtuse angle, parted from the second by much more than four times its length; second nearly straight, slanting, forming a very obtuse angle, very much longer than the first; third hardly waved, slightly slanting, forming a very slightly acute angle; fourth hardly waved, slightly slanting, forming a hardly acute angle, longer than the third; fifth slightly curved, upright, forming a hardly obtuse angle. Head wanting: fore-chest dark red, not narrower in

front than behind; scutcheon adorned with a large black spot in front of each side, and with a black middle stripe which is widened before and behind; hind-scutcheon rather narrow above, a little broader and slightly rounded at the base of each fore-wing, extending beyond the scutcheon, very slightly excavated on each side: scutcheon of the middle-chest black, red on each side and behind, and adorned with two slender, slightly oblique red stripes; hind border not excavated: abdomen dark red, a little longer than the chest, nearly linear till the tip where it is rounded, pitchy towards the base and at the tip, adorned with a large white spot on each side near the base and with a slender interrupted white stripe near the tip; under side pitchy with a broad pale red stripe on each side: opercula none; tymbals dark red, rather small; drums pitchy, of moderate size, more than one-third of the length of the abdomen, parted by a narrow interval: legs tawny; tips of the claws black; fore-thighs pitchy above, armed with three tawny teeth, two large, one of moderate size: wings colourless; a small brown spot at the tip of each fore-wing; veins black, tawny towards the base: fore borders tawny, darker towards the tips; primitive areolet, fore-membranes, and flaps at the base and along part of the fore border pale tawny. Length of the body 8 lines; of the wings 23 lines.

a. ———?

# 81. CICADA SOLENNIS, Mas.

*Nervus transversus* 1us subcurvus, obliquus, angulum valdè obtusum fingens, 2o plus quadruplò ejus longitudine divisus; 2us rix curvus, valdè obliquus, angulum perobtusum fingens, 1o rix brevior; 3us subundatus, subobliquus, angulum rectum fingens; 4us subundatus, obliquus, angulum rix acutum fingens, 3o paulò longior.

Second marginal areolet a little more than three-fourths of the length of the first: first cross-vein very slightly curved, slanting, forming a very obtuse angle, parted from the second by more than four times its length; second hardly curved, very slanting, forming an extremely obtuse angle, nearly as long as the first; third very slightly waved, very slightly slanting, forming a right angle; fourth very slightly waved, slanting, forming a hardly acute angle, very little longer than the third; fifth slightly curved, upright, forming a hardly acute angle. Body tawny, tinged with green: head as broad as the fore-chest, adorned with two black bands, one behind, the other across the crown, but interrupted on each side of the eyelets; under side adorned with two broad black interrupted oblique

stripes; face very slightly convex, not at all prominent, adorned above with a broad black band; furrows in front blackish: mouth tawny with a black tip, reaching the hind-hips: eyes rather prominent: feelers black: fore-chest narrower before than behind; furrows of the scutcheon blackish; hind-scutcheon green, adorned with four black spots, two of these are on the fore border, and one nearer each side and close to the hind border; sides yellow, slightly angular, excavated towards the fore border: scutcheon of the middle-chest adorned with three very indistinct slightly ferruginous obconical stripes, a pitchy stripe runs along part of the outer side of each of the inner pair which are much shorter than the outer pair, the latter contain some indistinct pitchy marks; hind border slightly excavated: abdomen obconical, a little longer than the chest: opercula small, partly covering the tymbals which are whitish; drums pale tawny, tinged with green, black at the base, small, widely apart: legs tawny, tinged with green; fore-thighs armed with a long black tooth: wings colourless; fore border green as far as the brand, pitchy from thence till near the tip; veins green, black towards the tips. Length of the body  $10\frac{1}{2}$  lines; of the wings 30 lines.

*a.* St. Lucia. Presented by W. Muter, Esq.

## 82. CICADA PRONOE, Mas.

*Nervus transversus* 1us subundatus, obliquus, angulum valdè obtusum fingens, 2o plus triplò ejus longitudine divisus; 2us subundatus, valdè obliquus, angulum perobtusum fingens, 1o multò longior; 3us subundatus obliquus, angulum rectum fingens; 4us valdè undatus, angulum vix acutum fingens, 3o longior et obliquior.

Second marginal areolet full five-sixths of the length of the first: first cross-vein slightly waved, slanting, forming a very obtuse angle, parted from the second by much more than thrice its length; second slightly waved, very slanting, forming an extremely obtuse angle, much longer than the first; third very slightly waved, slanting, forming a right angle; fourth much waved, forming a hardly acute angle, more slanting and much longer than the third; fifth curved, almost upright, forming a hardly acute angle. Body tawny, short, broad: head and fore-chest ferruginous: head nearly as broad as the fore-chest, pitchy about the eyelets; face very convex, not prominent: mouth tawny with a black tip, reaching nearly to the hind-hips: eyes prominent: feelers black, tawny at the base: hind-scutcheon of the fore-chest tawny, very broad, forming a very obtuse angle above the base of the fore-wing, slightly indented on

each side; its hind border slightly waved: scutcheon of the middle-chest pitchy, in which hue the four obconical stripes of a dark ferruginous colour may be indistinctly traced: a broad tawny band along each side; cross-ridge ferruginous; hind border rather deeply excavated: abdomen pitchy, obconical, a little longer than the chest; hind borders of the segments ferruginous; sides and tip mostly tawny: opercula none; tymbals and drums extremely small: legs tawny; claws black, tawny at the base; fore-thighs armed with three tawny teeth, two of moderate size, one very small: wings colourless; fore border green in front, black behind until a short distance beyond the brand where it is wholly black; veins tawny, black towards the tips and along most of the fore border; primitive areolet tawny; fore-flaps gray; hind-wings tawny at the base. Length of the body 14 lines; of the wings 43 lines.

### 83. CICADA SEPTEMDECIM.

*Cicada septemdecim*, *Lim. Syst. Nat.* ii. 708, 20. *Kalm, Reize*, 173. *Act. Holm.* 1756, 101. *Gmel. Ed. Syst. Nat.* i. 3, 2099, 20. *Stoll, Cic.* 26, pl. 3, f. 14. *Oliv. Enc. Méth.* v. 749, 13, pl. 111, f. 2. *Collinson, Obs. Cic. North Amer. Phil. Trans. Lond.* liv. 65. *Hildreth, Amer. Journ. Sci.* x. 327. *Potter, Notes on the Locusta.* *Harris, Ins. New Engl.* 167.

*Tettigonia Septemdecim*, *Fabr. Syst. Ent.* 679, 6. *Sp. Ins.* ii. 319, 6. *Mant. Ins.* ii. 266, 9. *Ent. Syst.* iv. 199. *Syst. Rhyn.* 36, 15.

*a, b.* North America. Presented by E. Doubleday, Esq.  
*c, d.* North America.

### CICADA (pupa).

*a.* New Holland. Presented by the Haslar Hospital.

### CICADA (pupa).

*a.* South Africa. Presented by Dr. A. Smith.

### CICADA (pupa).

*a, b.* Hong Kong. Presented by J. C. Bowering, Esq.

## CICADA (pupa).

*a--f.* New Zealand. Presented by Dr. A. Sinclair.

## 84. CICADA CHARICLO, MAS.

*Nervus transversus* 1us subcurvus, ferè erectus, angulum subobtusum fingens, 2o quinquies ejus longitudine divisus; 2us subcurvus, obliquus, angulum obtusum fingens, 1o longior; 3us ferè rectus, obliquus, angulum acutum fingens; 4us subcurvus, obliquus, angulum acutum fingens; 3o multò longior.

Second marginal areolet much less than two-thirds of the length of the first: first cross-vein slightly curved, nearly upright, forming a very slightly obtuse angle, parted from the second by full five times its length; second slightly curved, slanting, forming an obtuse angle, longer than the first; third nearly straight, slanting, forming an acute angle; fourth very slightly curved, slanting, forming an acute angle, very much longer than the third: fifth slightly curved, nearly upright, forming a right angle. Body pale green, tinged with white: head a little narrower than the fore-chest, adorned with a slender pitchy band and on each side near the base of the feeler with a pitchy spot: face slightly convex, adorned with a pitchy band; mouth tawny with a pitchy tip, reaching the hind-hips: eyes not prominent: feelers black, tawny towards the base: scutcheon of the fore-chest rather long, adorned with four pitchy spots, one on the fore border, one on the hind border, and one on each side; hind-scutcheon narrow above, widened and almost angular above the base of the fore-wing, slightly indented on each side: scutcheon of the middle chest adorned with four broad obconical stripes, the outer pair oblique, much longer than the inner pair, inclosing two pitchy marks, one of which is near the base, the other larger and near the tip; two very small pitchy marks between the outer pair and the inner pair; disks of the latter pitchy, and there is a pitchy stripe between them and the cross-ridge: hind border hardly excavated: abdomen obconical, tawny towards the tip, very much longer than the chest: opercula none; tymbals tawny, adorned with a white ringlet; drums pale tawny, very small, not far apart: legs green, covered with white; thighs and shanks adorned with brown marks; shanks tinged with tawny; feet tawny with pitchy tips; claws tawny with black tips; fore-thighs armed with three teeth, the first rather long, very oblique, second of moderate size, third rather small: wings colourless; fore border bright pale green as far as the brand which is pitchy, tawny from thence towards the tip, beset with very

short spines; veins pale red, black towards the tips; first and second cross-veins clouded with brown; a row of small brown spots on the tips of the longitudinal veins or the marginal areolets; primitive areolet tinged with pale tawny; fore-flaps pale green; veins of the hind-wings pale green, black towards the tips: flaps whitish at the base, clouded with pale brown along the fore border. Length of the body 9 lines: of the wings 28 lines.

a. Cuba.

### 85. CICA DA SUBTINCTA, Fem.

*Nervus transversus* 1us subcurvus, subobliquus, angulum subobtusum fignens, 2o triplò ejus longitudine divisus; 2us subcurvus, obliquus, angulum obtusum fignens, 1i longitudine; 3us undatus, valdè obliquus, angulum acutum fignens; 4us subcurvus, subobliquus, angulum rectum fignens, 3o multò brevior.

Second marginal areolet nearly seven-eighths of the length of the first: first cross-vein slightly curved, very slightly slanting, forming a very slightly obtuse angle, parted from the second by thrice its length; second very slightly curved, slanting, forming an obtuse angle, as long as the first; third waved, very slanting, forming an acute angle; fourth very slightly curved, slightly slanting, forming a right angle, very much shorter than the third; fifth straight, slightly slanting, forming an obtuse angle. Body rather short and broad: head pitchy above, narrower than the fore-chest, with two green reversed C-shaped marks approaching each other on the region of the cyelets; face convex, green, with a large black spot near the base of the mouth which is tawny with a black tip, and reaches beyond the hind-hips: eyes prominent: fore-chest green; disk of the scutcheon mostly tawny; fore border and hind border black; hind-scutcheon green, tawny along the fore border, adorned with two brown spots, slightly notched and armed with an extremely small tooth on each side: scutcheon of the middle-chest green, tinged with tawny, adorned with irregular black stripes, part of which communicate with a large transverse black spot on the hind part; hind border slightly excavated: breast green mingled with tawny: abdomen ferruginous, hardly longer than the chest; hind borders of the segments black: legs greenish-black; tips of the shanks, of the feet and of the fore-thighs black; claws black, tawny towards the base; fore-thighs armed with two acute teeth; spines of the hind-shanks black: wings colourless, brown at the base; a very slight brown tinge at the tips of the fore-wings; veins tawny with broad

black bands ; cross-veins chiefly black ; clouded with brown ; a row of brown spots on the tips of the longitudinal veins of the marginal areolets ; fore-flaps brown ; hind-flaps brown at the base. Length of the body 15 lines ; of the wings 50 lines.

*a.* Silhet. From the Rev. J. Stainforth's collection.

#### 86. CICADA ALBIFLOS, Mas.

*Nerrus transversus* *lus subcurvus, subobliquus, angulum subacutum fngens*, 2o *plus quadruplò ejus longitudine divisus* ; 2us *ferè rectus, subobliquus, angulum obtusum fngens*, 1o *paullò brevior* ; 3us *subrectus, rectus, angulum obtusum fngens* 4us *vix unilatus, obliquus, angulum vix acutum fngens*, 3o *multò longior.*

Second marginal areolet half the length of the first : first cross-vein slightly curved, slightly slanting, forming a slightly acute angle, parted from the second by more than four times its length ; second nearly straight, slightly slanting, forming an obtuse angle, a little shorter than the first, joining the fourth marginal areolet very near the base of the latter ; third nearly straight, upright, forming an obtuse angle ; fourth hardly waved, slanting, forming a hardly acute angle, very much longer than the third ; fifth slightly curved, nearly upright, forming a hardly obtuse angle. Body very pale ferruginous, covered with white down : head very little narrower than the fore-chest ; a black dot on each side of the eyelets ; face convex, not prominent : mouth tawny with a black tip, reaching the hind-lips : eyes a little prominent : feelers black, tawny at the base ; fore-chest a little narrower in front than behind ; furrows of the scutcheon tawny ; hind-scutcheon broad, a little widened and rather angular on each side, convex in front where it embraces the sides of the scutcheon ; hind border of the middle-chest excavated : abdomen obconical, a little longer but narrower than the chest : opercula none : tymbals pale ferruginous ; drums pale tawny, rather small, less than one-third of the length of the abdomen, parted by a moderate interval : legs pale tawny ; thighs adorned with pitchy stripes : claws pitchy above except at the base ; tips of the fore-shanks and the fore-feet pitchy ; fore-thighs armed with three tawny teeth, two of which are very small, and the third, which is between them, is very large, a structure peculiar to this species : wings whitish ; veins of the fore-wings pale buff or pale red, of the hind-wings almost white ; fore border pale red or whitish green, tinged with brown about the brand, as are also some parts of the veins in the disks ; tips of the longitudinal vein of the first marginal areolet, and of the

first, second and third cross-veins clouded with brown. Length of the body 12 lines; of the wings 24 lines.

*a, b.* Jamaica. From Mr. Gosse's collection.

*c—e.* Jamaica.

### 87. *CICADA JOHANNIS*, Mas et Fem.

*Nervus transversus* 1us *subcurvus*, *obliquus*, *angulum obtusum* *figens*, 2o *plus duplò ejus longitudine divisus*; 2us *subcurvus*, *subobliquus*, *angulum obtusum figens*, 1o *paulò brevior*; 3us *subundatus*, *obliquus*, *angulum subacutum figens*; 4us *curvus*, *serè erectus*, *angulum vix acutum figens*, 3i *longitudine*.

Second marginal areolet more than half the length of the first: first cross-vein slightly curved, slanting, forming an obtuse angle, parted from the second by a little more than twice its length; second slightly curved, slightly slanting, forming an obtuse angle, a little shorter than the first; third slightly waved, slanting, forming a slightly acute angle; fourth curved, nearly upright, forming a hardly acute angle, as long as the third; fifth almost straight, upright, forming a right angle. Much resembles *C. Orni* but is smaller. Body grass-green with a tawny tinge: head narrower than the fore-chest, adorned with two black bands, one in front interrupted, irregular and slightly arched, the other behind sending back five short stripes, the middle one forked between the eyelets; face slightly convex, not prominent: mouth tawny with a black tip, reaching the hind-hips: eyes prominent: feelers black: fore-chest narrower in front; scutcheon adorned with two oblique brown stripes on each side, and in the middle with two straight black stripes, widened in front and sending out two branches on each side; hind-scutcheon widened and slightly angular on each side, adorned with two brown marks above the base of each fore-wing: scutcheon of the middle-chest adorned with five brown stripes, the side pairs interrupted, especially the outer pair; hind border very slightly excavated: abdomen tawny, very much longer than the chest: a brown mark on each side of the base of the last segment; tip black: opercula large; drums pale tawny, small, far apart: legs grass-green, clothed with short pale yellow and black hairs: claws black, pale green at the base; fore-thighs armed with three black teeth with tawny tips; a few tawny spines on the hind-shanks: wings colourless; fore border green; veins pale green, darker towards the tips, striped with black at the base, tinged with black across the breadth beneath the band which is green towards the base and black



towards the tip of the wing; cross-veins more or less clouded with brown; a row of small brown spots on the tips of the longitudinal veins of the marginal areolets; flaps colourless. Length of the body 9—10 lines; of the wings 26—28 lines.

a—c. St. John's Bluff, Florida. Presented by E. Doubleday, Esq.  
d, e. ———?

#### 88. CICALA SCUTELLARIS, Mas.

*Nervus transversus* *1us curvus, ferè erectus, angulum ferè rectum*  
*figens, 2o plus triplò ejus longitudine divisis; 2us curvus,*  
*subobliquus, angulum obtusum figens, 1o longior; 3us sub-*  
*rectus, obliquus, angulum subarutum figens; 4us subcurvus,*  
*vallè obliquus, angulum acutum figens, 3o multò longior.*

Second marginal areolet four-fifths of the length of the first: first cross-vein curved, nearly upright, forming an almost right angle, parted from the second by more than thrice its length; second curved, slightly slanting, forming an obtuse angle, longer than the first; third nearly straight, slanting, forming a slightly acute angle; fourth very slightly curved, very slanting, forming an acute angle, very much longer than the third; fifth nearly straight, slanting, forming an obtuse angle. Body green: head and fore-chest tinged with tawny: head as broad as the fore-chest: three black marks on the crown; face slightly convex, not prominent, adorned above with an elliptical black mark: mouth tawny with a black tip reaching the middle-hips: eyes rather prominent: feelers black: fore-chest adorned with a greenish white stripe, on each side of which are two black marks, the indications of oblique black stripes; side border of the scutcheon black; hind-scutcheon rather narrow, its sides nearly straight: disk of the scutcheon of the middle-chest ferruginous, adorned on each side with three slight black streaks; excavation on the hind border broad but very shallow: abdomen obconical, ferruginous, not longer than the chest; hind borders of the segments grass-green; under side tawny with a broad black stripe: opercula none: tymbals whitish: drums small, tawny, parted by a narrow interval: legs green; shanks and feet mostly tawny: tips of the claws black; fore-thighs adorned with three stout black teeth: wings colourless, green at the base; fore border tawny, green at the base, brown towards the tip; veins black, green towards the base; fore borders of the flaps clouded with brown. Length of the body 8 lines; of the wings 21 lines.

a. New Zealand. From Mr. Earl's collection.

## 89. CICADA TORRIDA, Mas.

*Nervus transversus* 1us subundatus, obliquus, angulum valdè obtusum fingens, 2o ferè triplò ejus longitudine divisus; 2us curvus, obliquus, angulum valdè obtusum fingens, 1o brevior; 3us subundatus, obliquus, angulum vix acutum fingens; 4us subcurvus, obliquus, angulum vix acutum fingens, 3o longior.

First cross-vein slightly waved, slanting, forming a very obtuse angle, parted from the second by near thrice its length; second curved, slanting, forming a very obtuse angle, shorter than the first; third very slightly waved, slanting, forming a hardly acute angle; fourth slightly curved, slanting, forming a hardly acute angle, longer than the third; fifth curved, nearly upright, forming a slightly acute angle. Body tawny, partly clothed with pale down: head nearly as broad as the fore-chest; an interrupted black band on the crown; face convex, pitchy on each side, adorned with a yellow stripe: mouth tawny with a black tip, reaching the hind-hips: eyes rather prominent: feelers black: scutcheon of the fore-chest adorned with two black stripes which are widened on the fore border and on the hind border and converge towards the latter; hind-scutcheon narrow in the middle, widened and forming an obtuse angle at the base of each fore-wing, not excavated on each side: scutcheon of the middle-chest adorned with four pitchy stripes which do not extend beyond half the length; inner pair straight; outer pair slanting; hind border slightly excavated: abdomen slightly obconical, longer than the chest: opercula none; tymbals tawny: drums small, pale tawny; legs tawny; tips of the claws black; fore-thighs armed with two small tawny teeth: wings colourless; primitive areolet tawny; fore border and veins tawny, black towards the tips; fore-flaps pale brown; hind-flaps pale brown at the base and along the middle-vein. Length of the body 9 lines; of the wings 30 lines.

a. British Guiana. From Sir R. Schomburghk's collection.

b. Demerara.

## 90. CICADA INVARIA, Fcm.

*Nervus transversus* 1us valdè curvus, subundatus, obliquus, angulum acutum fingens, 2o quadruplò ejus longitudine divisus; 2us subundatus, obliquus, angulum obtusum fingens, 1o multò longior; 3us ferè rectus, subobliquus, angulum rectum fingens; 4us subundatus, obliquus, angulum subacutum fingens, 3o multò longior.

Second marginal areolet a little more than half the length of the first: first cross-vein much curved, slightly waved, slanting,

forming an acute angle, parted from the second by four times its length; second very slightly waved, slanting, forming an obtuse angle, much longer than the first; third nearly straight, slightly slanting, forming a right angle; fourth slightly waved, slanting, forming a slightly acute angle, much longer than the third; fifth almost straight, nearly upright, forming a hardly obtuse angle. Body ferruginous, tinged with green: head much narrower than the fore-chest; face small, very convex, rather prominent: mouth tawny with a black tip, reaching the hind-hips: eyes not prominent: feelers tawny, ferruginous at the base: fore-chest narrower in front than behind; scutcheon adorned with some oblique dark ferruginous marks between the furrows which also have that colour; hind-scutcheon rounded and much widened at the base of each fore-wing, slightly convex and not excavated on each side: hind border of the scutcheon of the middle-chest hardly excavated: abdomen longer than the chest, hairy towards the tip; oviduct pitchy: legs tawny; thighs and shanks adorned with ferruginous stripes; feet ferruginous towards the tips; claws black, tawny at the base; fore-thighs armed with one large ferruginous tooth which is near the tip: wings colourless; fore borders and veins tawny. Length of the body 10 lines; of the wings 28 lines.

a. South America.

#### 91. CICADA HIRUNDO, Mas.

*Nervus transversus 1us curvus, subobliquus, angulum obtusum fingens, 2o plus duplò ejus longitudine divisus; 2us subcurvus, obliquus, angulum valdè obtusum fingens, 1o paultò brevior; 3us subcurvus, obliquus, angulum subacutum fingens; 4us ferè rectus, obliquus, angulum subacutum fingens, 3o multò brevior.*

Second marginal areolet a little more than half the length of the first: first cross-vein curved, slightly slanting, forming an obtuse angle, parted from the second by much more than twice its length; second slightly curved, slanting, forming a very obtuse angle, very little shorter than the first; third very slightly curved, slanting, forming a slightly acute angle; fourth almost straight, slanting, forming a very slightly acute angle, much shorter than the third; fifth thick, straight, very slightly slanting, forming an obtuse angle. Body short, ferruginous: head a little narrower than the fore-chest; crown adorned with a square-shaped dark ferruginous spot, on each side of which there is a little pitchy cross, and beyond the latter a dark ferruginous stripe which communicates in front with

a band of the same colour ; face dark ferruginous with a pale stripe, very convex, rather prominent : mouth yellow with a black tip, reaching the hind-hips : eyes prominent : feelers tawny, somewhat pitchy towards the tips : fore-chest rather narrower in front than behind : scutcheon adorned with a broad dark ferruginous stripe which is narrower in the middle and includes a slender pale ferruginous stripe ; hind-scutcheon narrow, slightly notched on each side : scutcheon of the middle-chest adorned with four indistinct dark ferruginous stripes ; hind border slightly excavated : abdomen obconical, a little shorter than the chest : oviduct pitchy : legs pale ferruginous ; claws pitchy towards the tips ; fore-thighs armed with three pitchy teeth, two of moderate size, one very small ; one pitchy band on each hind-shank, and two on each middle-shank : wings colourless, long, narrow ; a slight tawny tinge on the disks of the areolets towards the tips of the fore-wings ; first and second cross-veins clouded with brown ; a row of indistinct small tawny spots on the longitudinal veins of the marginal areolets ; fore border pale ferruginous ; brand part yellow, part pitchy ; veins pale ferruginous, darker towards the tips ; fore-flaps tawny ; hind-flaps colourless, tawny for a space along the hind border from the base. Length of the body 8 lines ; of the wings 29 lines.

## 92. CICADA PSOPHIS, Mas.

*Nervus transversus* 1us subcurvus, subobliquus, angulum subobtusum fingens, 2o quadruplò ejus longitudine divisus ; 2us curvus, erectus, angulum rectum fingens, 1o vix longior ; 3us ferè rectus, subobliquus, angulum vix acutum fingens ; 4us subcurvus, subobliquus, angulum vix acutum fingens, 3o ferè duplò longior.

Second marginal areolet nearly two-thirds of the length of the first : first cross-vein slightly curved, very slightly slanting, forming a very slightly obtuse angle, parted from the second by full four times its length ; second curved, upright, forming a right angle, hardly longer than the first ; third nearly straight, slightly slanting, forming a hardly acute angle ; fourth very slightly curved, slightly slanting, forming a hardly acute angle, nearly twice the length of the third ; fifth slightly curved, nearly upright, forming a hardly acute angle. Body green with a tawny tinge, clothed with whitish down : head very little narrower than the fore-chest ; crown black with the exception of a few small pale marks ; face convex, not prominent, black above with a slender yellow streak : mouth tawny with a black tip,

reaching a little beyond the middle-hips : eyes prominent : feelers black : scutcheon of the fore-chest adorned with two black spots on each side and with a broad black stripe which is much widened on the fore border and on the hind border, and encloses a green streak ; hind-scutcheon rather broad, widened at the base of each fore-wing, pitchy and slightly excavated on each side : scutcheon of the middle-chest adorned with four very broad black stripes which are united at the base, the inner pair are much shorter than the outer pair, and have a black ring round the hind part, and are succeeded by two black dots ; tips of the outer pair united with a black streak along each side ; a pitchy spot on the cross-ridge ; hind border very slightly excavated : abdomen obconical, a little longer than the chest, adorned with pitchy bands on the fore borders of the segments ; a broad pitchy band on each side beneath : opercula tawny, rather large ; drums pale green, of moderate size, meeting beneath ; legs green, clothed with short white hairs ; hips and thighs adorned with pitchy streaks ; feet and fore-shanks pitchy ; tips of the claws black ; fore-thighs armed with two long pitchy teeth : wings colourless ; fore border and veins green along half the length, black from thence to the tips ; first, second and third cross-veins clouded with brown ; a brown spot at the tip of each of the flaps. Length of the body 10 lines ; of the wings 30 lines.

a. Mexico. From Mr. Hartweg's collection.

### 93. CICADA SEX-GUTTATA, Mas.

*Nervus transversus* 1us curvus, obliquus, angulum subobtusum fingens, 2o plus duplò ejus longitudine divisus ; 2us fere rectus, valdè obliquus, angulum perobtusum fingens, 1o cix longior ; 3us subcurvus, obliquus, angulum acutum fingens ; 4us valdè curvus, subobliquus, angulum acutum fingens, 3o multò longior.

Second marginal areolet full half the length of the first : first cross-vein curved, slanting, forming a slightly obtuse angle, parted from the second by much more than twice its length ; second nearly straight, very slanting, forming an extremely obtuse angle, hardly longer than the first ; third slightly curved, slanting, forming an acute angle ; fourth very much curved, slightly slanting, forming an acute angle, much longer than the third ; fifth slightly curved, upright, forming a hardly acute angle. Body greenish-tawny : head narrower than the fore-chest, adorned with two black stripes which traverse the region of the eyelets, and are partly united, slightly widened on the hind border, somewhat branched in front ; on each

side of these are two black oblique stripes and one black spot, the latter behind the eye; a black stripe in front across the face which is very slightly convex and not at all prominent; mouth pale tawny with a black tip?; eyes prominent; feelers black: fore-chest narrower in front than behind; scutcheon adorned with two black parallel stripes which are united on the hind border, and are widened into two angles on the outer side; a short curved pitchy mark on each side between the furrows which are also pitchy; side borders black; hind-scutcheon much broader on each side than in the middle, adorned with three pitchy spots and forming an obtuse angle near the base of each fore-wing, slightly excavated towards the fore border: disk of the scutcheon of the middle-chest green, adorned with three indistinct obconical broad tawny stripes, the middle one is divided by a slender black stripe which extends beyond it towards the hind border, and each of its sides is bordered with black for two-thirds of the length from the base; four irregular black spots on each of the side stripes: hind border hardly excavated: abdomen tawny, obconical, longer than the chest, pitchy at the base: opercula tawny; small; drums very small, pale yellow, wide apart: legs yellowish-green; a pitchy spot near the tip of each thigh; fore-thighs armed with two long pitchy teeth: claws black, yellow at the base; fore-feet pitchy at the base and at the tips: wings colourless; veins green, banded with black across the middle beneath the brands, quite black towards the tips: brands pitchy; fore border green, tawny towards the tip; cross-veins from the first to the fourth clouded with brown; a row of brown spots on the tips of the longitudinal veins of the marginal areolets; a sharp black spine at the base of each fore-wing. Length of the body 12 lines; of the wings 30 lines.

#### 94. CICADA STIPATA, Fem.

*Nervus transversus* 1us vix undatus, obliquus, angulum rectum fingens, 2o plus triplò ejus longitudine divisus; 2us vix undatus, subobliquus angulum valdè obtusum fingens, 1o longior; 3us undatus, obliquus, angulum subacutum fingens; 4us subundatus, obliquus, angulum subacutum fingens, 3o brevior.

First cross-vein hardly waved, slanting, forming a right angle, parted from the second by much more than thrice its length; second indistinctly waved, slightly slanting, forming a very obtuse angle, longer than the first; third waved, slanting, forming a slightly acute angle; fourth slightly waved, slanting, forming a slightly acute an-

gle, shorter than the third; fifth very slightly curved, nearly upright, forming a slightly obtuse angle. Body tawny with a ferruginous tinge, short: head narrower than the fore-chest, adorned with a short broad black band which extends from the eyelets to the hind border and includes a tawny streak, on each side of it there is a black curve nearly including a tawny ellipse; a black spot on each side of the face at the base of the feeler; face convex, not prominent, adorned in front with a black stripe which is forked and widened above; mouth tawny with a black tip, reaching a little beyond the hind-hips: eyes prominent: feelers black, tawny at the base: fore-chest a little narrower before than behind; scutcheon adorned with six black stripes, the middle pair slightly converge from the fore border till near the hind border where they are angular and include a diamond-shaped tawny spot, the next pair curved, outer pair oblique; sides blackish: hind-scutcheon narrow in the middle, rounded, much widened and adorned with a pitchy spot above the base of each fore-wing, convex with the exception of a very slight excavation on each side: scutcheon of the middle-chest adorned with three black stripes which are united towards the hind border; on each side of these are two black stripes, and in front of the latter two black spots; hind border slightly excavated: abdomen ferruginous, hardly longer than the chest, not decreasing in breadth till near the tip where it tapers abruptly, slightly varied with tawny, of which there are two broad indistinct stripes diverging from the base and extending to each side at two-thirds of the length; last segment tawny with a broad irregular black stripe on each side: oviduct ferruginous, black and serrated at the tip: legs tawny; hips and thighs adorned with pitchy marks; tips of the shanks and of the feet pitchy; claws black, ferruginous at the base: fore-thighs armed with three black teeth, two of moderate size, one very small: wings colourless, long and narrow; fore-wings with an indistinct tawny tinge; fore borders and veins bright tawny, black towards the tips; brands tawny towards the base, black towards the tip of the wing; cross-veins from the first to the fourth clouded with brown; a row of small brown spots near the tips of the longitudinal veins of the marginal areolets; fore-flaps gray; hind-flaps gray at the base and for a short space along the hind border. Length of the body 11 lines; of the wings 28 lines.

*a.* ——— ?

## 95. CICADA ECTERPE, Mas.

*Nervus transversus* *lus subcurvus, ferè erectus, angulum subobtusum fingens*, 2o *plus quadruplò ejus longitudine divisus*; *2us subcurvus, obliquus, angulum valdè obtusum fingens*, 1o *via longior*; *3us ferè rectus, subobliquus, angulum ferè rectum fingens*; *nonnunquam subundatus, valdè obliquus, angulum acutum fingens*; *4us subundatus, obliquus, angulum subacutum fingens*.

Second marginal areolet much less than half the length of the first: first cross-vein very slightly curved, nearly upright, forming a slightly obtuse angle, parted from the second by much more than four times its length; second very slightly curved, slanting, forming a very obtuse angle, hardly longer than the first; third almost straight, slightly slanting, forming a nearly right angle, or slightly waved, very slanting and forming an acute angle; fourth slightly waved, slanting, forming a very slightly acute angle, longer than the third; fifth curved, upright, forming a slightly acute angle. Body tawny: head nearly as broad as the fore-chest, black above: a tawny spot on each side by the hind border and a tawny band in front; face convex, not prominent, adorned with a small tawny spot. tawny with a black middle stripe in front: mouth tawny with a black tip, reaching the middle-hips: eyes prominent: feelers black: fore-chest narrower before than behind; scutcheon adorned with a black stripe which is much widened on the hind border and has a small black spot on each side of it; hind-scutcheon broad, especially at the base of each fore-wing where it forms an obtuse angle, and its border along each side is black and slightly excavated: scutcheon of the middle-chest adorned with three very broad obconical black stripes which are united at their base, the middle one is much excavated on each side towards the tip; hind border slightly excavated: abdomen obconical, hardly longer than the chest, black above; hind borders of the segments and tip tawny: opercula large, close, tawny, nearly triangular; drums whitish, rather small, nearly triangular, parted by a moderate interval, the outer angle black: legs tawny; thighs adorned with pitchy stripes; fore-thighs armed with two rather long pitchy teeth; claws partly pitchy: wings colourless, tawny at the base; fore border pale tawny and serrated as far as the brund which is brown; veins black, more or less tawny towards the base; cross-veins from the first to the third, and the base of the first marginal areolet, slightly clouded with brown; fore-membrane grayish; flaps tinged with pale brown along the fore border, buff for a short



space along the hind border. Length of the body 8 lines: of the wings 28 lines.

*a, b.*

#### 96. CICALA DEXITHEA, Mas.

*Nervus transversus 1us curvus, subobliquus, angulum subacutum fingens, 2o sexties ejus longitudine dirisus; 2us subcurvus, subobliquus, angulum obtusum fingens, 1o brevior; 3us subcurvus subobliquus, angulum rectum fingens; 4us subcurvus, obliquus, angulum acutum fingens, 3o fere duplo longior.*

Second marginal areolet less than half the length of the first: first cross-vein curved, very slightly slanting, forming a slightly acute angle, parted from the second by full six times its length; second slightly curved, slightly slanting, forming an obtuse angle, shorter than the first; third very slightly curved, slightly slanting, forming a right angle; fourth slightly curved, slanting, forming an acute angle, nearly twice the length of the third; fifth curved, nearly upright, forming a slightly acute angle. Body tawny: head and chest tinged with green, especially on each side: head a little narrower than the fore-chest, somewhat pitchy about the eyelets; face rather convex, adorned with two pitchy stripes: mouth with a black tip, reaching a little beyond the hind-hips: eyes not prominent: feelers tawny: hind-scutcheon of the fore-chest narrow in the middle, angular and much widened at the base of each fore-wing, excavated on each side: scutcheon of the middle-chest adorned with four ferruginous stripes; inner pair short and very indistinct; hind border hardly excavated: abdomen obconical, much longer than the chest, ferruginous towards the tip: opercula none; tymbals tawny; each adorned with a white half-circle; drums pale green, of moderate size, meeting, about one-third of the length of the abdomen: legs tawny; tips of the shanks and of the feet pitchy; tips of the claws black; fore-thighs armed with two tawny teeth: wings colourless; fore borders and veins pale green, tawny towards the tips; first and second cross-veins slightly clouded with pale brown; a row of pale brown spots on the marginal areolets; fore-flaps pale buff; hind-flaps pale buff between the middle-vein and the hind border. Length of the body 10 lines; of the wings 28 lines.

*a.* ——— ?

97. *CICADA ZEALANDICA*.

*Cicada Zealandica*, *Boisdural, Voy. Astrol.* 611, pl. 10, f. 6.

*a.* New Zealand. Presented by Dr. Dieffenbach.

98. *CICADA RUFIVENTRIS*, Mas.

*Nervus transversus* *lus subcurvus, valdè obliquus, angulum perobtusum fingens*, 2o *ferè quadruplò ejus longitudine divisus*; 2us *ferè rectus, obliquus, angulum valdè obtusum fingens*, 1o *breior*; 3us *ferè rectus, obliquus, angulum rix acutum fingens*; 4us *ferè rectus, obliquus, angulum subacutum fingens*, 3o *longior*.

Second marginal areolet much more than three-fourths of the length of the first: first cross-vein very slightly curved, very slanting, forming an extremely obtuse angle, parted from the second by almost four times its length; second almost straight, slanting, forming a very obtuse angle, shorter than the first; third almost straight, slanting, forming a hardly acute angle; fourth almost straight, slanting, forming a very slightly acute angle, longer than the third; fifth slightly curved, nearly upright, forming a hardly obtuse angle. Body black: head rather small, narrower than the fore-chest, adorned with a large green spot on each side; face very convex, rather prominent, adorned in front with two black stripes which send forth a row of black bands on each side: mouth black, extending a little beyond the middle-hips: eyes prominent: feelers black: fore-chest narrower in front than behind; scutcheon adorned with seven green stripes: the middle one linear; the three side pairs oblique and more or less irregular and excavated; hind-scutcheon green, rounded and widened at the base of each fore-wing, slightly excavated on each side: scutcheon of the middle-chest adorned with five green stripes, the middle one linear, the inner pair curved and very irregular, the outer pair short and oblique; hind border green, its excavation extremely slight; abdomen dark red with a tawny spot near the base, nearly linear till near the tip, a little longer than the chest, black at the base above; a black band on the hind border of each segment; under side paler: opercula none; tymbals hoary with brown furrows, between which are brown spots; drums small, greenish with black disks towards the base, wide apart: legs green; thighs striped with black; claws tawny with black tips; fore-thighs armed with three black teeth, one of them very small; fore-shanks and fore-feet black; middle-shanks black towards the tips; four hinder feet pitchy: wings slightly tinged with tawny; a small tawny spot

at the base of each fore-wing; veins tawny, black towards the tips, marked with black at the base; fore border green with a black edge which is beset with black bristles, black with a red streak beneath towards the tip; fore-membrales white; hind-wings adorned with blue opaline lustre; flaps brown towards the base which is white. Length of the body  $11\frac{1}{2}$  lines; of the wings 26 lines.

a. Cape.

b. ———?

#### 99. CICADA ALBIDA.

*Cicada albida*, *Oliv. Enc. Méth.* v. 755, 39, pl. 113, f. 3. *Stoll, Cic.* 88. pl. 23, f. 125.

a. Para. From Mr. Stevens's collection.

b. ———? From Mr. Walker's collection.

c. Demerara.

#### 100. CICADA GRISEA.

*Cicada grisea*, *Oliv. Enc. Méth.* v. 747, 3. *Gmel. Ed. Syst. Nat.* i. 3, 2098, 87. *Germ. Thon, Arch.* ii. 2, 38. *Silb. Rev. Ent.* ii. 70, 35.

*Tettigonia grisea*, *Fabr. Syst. Ent.* 678, 2. *Sp. Ins.* ii. 318, 2. *Mant. Ins.* ii. 265, 3. *Ent. Syst.* iv. 17, 3. *Syst. Rhyn.* 34, 4.

a. Egypt.

b. ———? From Mr. Shuckard's collection.

#### 101. CICADA ORNI.

*Cicada Orni*, *Linna. Syst. Nat.* i. 2, 707, 18. *Réaumur. Ins.* v. 151, pl. 16, f. 7. *Seba, Mus.* 4. pl. 85, f. 4, 5. *Roes. Ins.* ii. *Gryll.* pl. 25, f. 1, 2, pl. 26, f. 3—5. *Salz. Hist. Ins.* pl. 10, f. 65. *Schæff. Icon.* pl. 4, f. 14. *Brahm. Handb. Ins.* i. 636, 192. *Gcoff. Ins.* i. 429, 2. *Oliv. Enc. Méth.* v. 753, 32. *Vill. Ent.* i. 457, 7. *Gmel. Ed. Syst. Nat.* i. 3, 2097, 16. *Scop. Ent. Carn.* 346. *Brandt und Ratz. Med. Zool.* ii. 211, pl. 26, f. 1, 3. *Solier, Ann. Soc. Ent. Fr.* vi. 213. *Stoll, Cic.* 92, pl. 24, f. 11. *Burm. Handb. Ent.* ii. 1, 181, 4. *Germ. Thon, Arch.* ii. 2, 39. *Silb. Rev. Ent.* ii. 70, 36. *Léon Duf. Rech. Hém.* 91, 1. *Brull. Hist. Nat. Ins. Hém.* pl. 5, f. 4. *Blanch.*

- Hist. Nat. Ins.* iii. 166, 10. *Ramb. Faun. And.* ii. 197. *Amyot et Serr. Hist. Nat. Héni.* 481, 2. *Costa, Notes. Ent.*  
*Tettigonia Orni, Fabr. Syst. Ent.* 680, 12. *Sp. Ins.* ii. 320, 15.  
*Mant. Ins.* ii. 267, 19. *Syst. Rhyn.* 40, 35. *Panz. Faun. Germ.* 50, 22.  
*Tettigonia punctata, Fabr. Ent. Syst. Suppl.* 516, 24.  
*Tettigia, Amyot, Ann. Soc. Ent. Fr. 2me Série,* v. 152, 372.  
*a—g.* South Europe.  
*h.* South Europe. Presented by J. G. Children, Esq.  
*i.* Italy. Presented by Dr. Dowler.  
*j.* Albania. Presented by W. W. Saunders, Esq.  
*k, l.* South France. Presented by M. Jaret.  
*m, n.* South France. Presented by F. Walker, Esq.

102. *CICADA STIGMATICA.*

- Cicada stigmatica, Germ. Thon, Arch.* ii. 2, 99. *Silb. Rev. Ent.* ii. 63, 20.  
*a—d.* Brazil.?

103. *CICADA APICALIS.*

- Cicada apicalis, Germ. Thon, Arch.* ii. 2, 96. *Silb. Rev. Ent.* ii. 63, 21.  
*a—c.* North India. From Mr. Stevens's collection.  
*d.* North India. From Mr. Argent's collection.

104. *CICADA APICIFERA, Fem.*

*Nervus transversus 1us rectus, erectus, angulum subobtusum fingens, 2o quinquies ejus longitudine divisus; 2us subcurvus, erectus, angulum subobtusum fingens, 1o longior; 3us rectus, obliquus, angulum subacutum fingens; 4us rectus, obliquus, angulum rectum fingens, 3o paullo longior.*

Second marginal arcolet more than three-fourths of the length of the first: first cross-vein straight, upright, forming a very slightly obtuse angle, parted from the second by five times its length; second very slightly curved, upright, forming a very slightly obtuse angle, longer than the first; third straight, slanting, forming a slightly acute angle; fourth straight, slanting, forming a right angle, a little longer than the third; fifth slightly curved, nearly upright, forming

an obtuse angle. Body ferruginous, tawny beneath: head tawny, region of the eyelets pitchy; a pitchy mark on each side of the front; a black stripe on the face which is very convex and somewhat prominent: eyes prominent: mouth tawny with a black tip, reaching the middle-hips: feelers black: fore-chest not broader than the head, adorned with a tawny stripe; furrows somewhat tawny; sides widened by the base of the fore-wings, straight elsewhere; hind-scutcheon narrow above, broader and tawny on each side: scutcheon of the middle-chest adorned with six imperfect stripes, the middle pair straight, the other four slightly oblique; hind border hardly excavated: abdomen obconical, much longer than the chest, very tapering towards the tip, adorned with a tawny spot on each side near the base, pitchy beneath towards the tip: oviduct pitchy: legs tawny; claws black: fore-thighs armed with three black teeth, two large and one small: wings and flaps brownish tawny, brown at the base and along the fore border of the fore-wings: veins black, brown at the base; flaps brown along the fore border. Length of the body 10 lines; of the wings 26 lines.

#### 105. *CICADA TRISTIGMA*.

*Cicada tristigma*, *Germ. Silb. Rev. Ent.* ii. 69, 33.

*a—c.* New Holland.

#### 106. *CICADA NODOSA*, Fem.

*Nervus transversus* *1us rectus, valdè obliquus, angulum perobtusum* *figens, 2o plus triplò ejus longitudine divisus; 2us ferè rectus, valdè obliquus, angulum perobtusum figens, 3o multò longior; 3us subundatus, obliquus, angulum acutum figens; 4us curvus, obliquus, angulum subacutum figens, 3o brevior.*

First cross-vein straight, very slanting, forming an obtuse angle, parted from the second by more than thrice its length; second nearly straight, very slanting, forming an extremely obtuse angle, much longer than the first; third slightly waved, slanting, forming an acute angle; fourth curved, slanting, forming a slightly acute angle, shorter than the third; fifth slightly curved, nearly upright, forming a nearly right angle. In the insect described, an additional cross-vein divides in the right wing the first marginal areolet, and in the left wing the second marginal areolet. Body tawny, almost hairless: head a little narrower than the fore-chest, adorned with a

broad black stripe which embraces the region of the eyelets, and has two black spots on each side, and a short black stripe in front of the two spots; face convex, not prominent, adorned with two black spots above, and with one near the mouth; the latter is tawny with a black tip and extends to the hind-hips: eyes prominent: feelers black, adorned with a tawny band: fore-chest a little narrower in front than behind; disk of the scutcheon adorned with two black parallel stripes which are widened into triangles before and behind; a short curved black mark on each side between the furrows which are blackish; hind-scutcheon rather narrow in the middle, paler, widened, extending much beyond the scutcheon and adorned with two large pitchy spots by the base of each fore-wing, a little excavated on each side: scutcheon of the middle-chest adorned with five black stripes; middle one oblanceolate, inner pair very narrow in the middle; outer pair much excavated; hind border hardly excavated: abdomen obconical, much longer than the chest, adorned on each side above and beneath with a row of pitchy spots; last segment slender, compressed, adorned with pitchy stripes: oviduct black: legs tawny; tips of the feet pitchy; claws tawny with black tips; fore-thighs with pitchy teeth, armed with three black teeth, two large, and one small: wings slightly tinged with tawny; veins yellow with some black bands in the middle part, tawny thence towards the tips which are black; longitudinal veins from the middle to the tips beset with numerous little knobs, these are much like the knob on the lower vein of the fourth discoidal areolet, but many of them are rather larger; fore-flaps pale buff; veins of the hind-wings black with a very few slight indications of knobs; first and second veins tawny; flaps pale buff at the base and for a space along the hind border, tinged with pale brown along the fore border. Length of the body 17 lines; of the wings 29 lines.

#### 107. CICADA TERMINUS, Fem.

*Nervus transversus* *Aut* *ferè rectus, ferè erectus, angulum subobtusum* *fingerens*, 20 *plus quadruplò ejus longitudine* *divisus*; 2us *ferè rectus, subobliquus, angulum ferè rectum* *fingerens*, 11 *longitudine*; 3us *ferè rectus, obliquus, angulum acutum* *fingerens*; 4us *rix undatus, obliquus, angulum acutum* *fingerens*, 30 *multò longior*.

Second marginal areolet full two-thirds of the length of the first: first cross-vein almost straight, nearly upright, forming a

slightly obtuse angle, parted from the second by more than four times its length; second nearly straight, slightly slanting, forming an almost right angle, as long as the first; third almost straight, slanting, forming an acute angle; fourth indistinctly waved, slanting, forming an acute angle, very much longer than the third; fifth slightly curved, nearly upright, forming a very slightly obtuse angle. Body ferruginous, clothed with a few white hairs: head pale tawny, rather broader than the fore-chest; region of the eyelets occupied by a pitchy mark whence two ferruginous stripes proceed to the hind border; a black band across the front; face very convex, rather prominent, adorned with a black stripe which extends to the mouth; mouth tawny with a black tip, extending to the middle-hips: eyes not prominent: feelers black: breast pale tawny: fore-chest not narrower in front than behind; scutcheon adorned with a slender yellow middle stripe, pitchy on each side; hind-scutcheon narrow, dark tawny, broader and forming a distinct angle at the base of each fore-wing, extending some distance beyond the scutcheon, nearly straight on each side: scutcheon of the middle-chest adorned with three yellow stripes which are united in front, the side pair slightly oblique; cross-ridge very small; hind border not excavated: abdomen obconical, pitchy towards the tip, very little longer than the chest: oviduct pitchy: legs tawny; thighs somewhat ferruginous; tips of the claws black; fore-thighs armed with three black teeth, two of these are large, and one small: wings colourless; their tips brown, which colour extends much more on the fore-wings than on the hind-wings, and in the former includes two nearly colourless spots; the tawny stripe along the fore border is much broader between the base and the brand than beyond the latter which is pitchy; veins tawny, black towards the tips; fore-flaps pale tawny; hind-flaps pale tawny along the hind border towards the base. Length of the body  $7\frac{1}{2}$  lines; of the wings 23 lines.

#### 108. CICADA SPHINX, Fem.

*Nervus transversus* 1us subcurvus, subobliquus, angulum rectum fingens, 2o plus triplò ejus longitudine divisus; 2us ferè rectus, subobliquus, angulum obtusum fingens, 1o multò brevior; 3us subundatus, obliquus, angulum subacutum fingens; 4us ferè rectus obliquus, angulum rix acutum fingens, 3o paullo brevior.

Second marginal areolet less than half the length of the first: first cross-vein slightly curved, very slightly slanting, forming a

right angle, parted from the second by much more than thrice its length; second nearly straight, slightly slanting, forming an obtuse angle, much shorter than the first; third indistinctly waved, slanting, forming a very slightly acute angle; fourth nearly straight, slanting, forming a hardly acute angle, very little shorter than the third; fifth straight, very slightly slanting, forming a slightly obtuse angle. Body greenish tawny: head very little narrower than the fore-chest, adorned with a forked black mark on the region of the eyelets, on each side of which there is a black dot; an interrupted black band in front; face slightly convex, not at all prominent, adorned with two black stripes which inclosing an elliptical space are united in front and proceed to the mouth, which is tawny, with a black tip, and reaches the hind-hips: eyes prominent: feelers black: fore-chest rather narrower in front than behind; scutcheon adorned with four slender black stripes; middle pair slightly oblique, somewhat curved, united on the hind border; side pair very oblique; beyond each of the latter there is a shorter black mark which is curved inward and reaches the side; hind-scutcheon narrow in the middle, much broader, slightly angular and extending beyond the scutcheon at the base of each fore-wing, slightly excavated on each side; scutcheon of the middle-chest adorned with five slender black stripes, the two side pair slightly oblique and much interrupted; hind border not excavated: abdomen tawny, longer and a little narrower than the chest; last segment adorned with two black obconical stripes: oviduct black: legs tawny; thighs marked with black at the base; fore-thighs adorned with two or three black marks, armed with three black teeth, of which two are large and one is small; feet black; hind-feet adorned with a broad greenish tawny band; claws dark tawny, with black tips: wings colourless, very long and narrow; tips of the fore-wings very slightly tinged with tawny; fore border greenish tawny as far as the black band, tawny beyond to the tip; veins black, pale tawny towards the base; fore-flaps brown; hind-flaps brown at the base, along the fore border and along part of the hind border. Length of the body 7 lines: of the wings 24 lines.

a. ———?



## 109. CICADA CUNA, Mas.

*Nervus transversus* 1us subundatus, valde obliquus, angulum acutum fingens, 2o plusquam ejus longitudine divisus; 2us rectus, subobliquus, angulum rectum fingens, 1i vix dimidii longitudine; 3us vix curvus, obliquus, angulum subacutum fingens; 4us subcurvus, subobliquus, angulum vix acutum fingens, 3i longitudine.

Second marginal areolet very much longer than the first: first cross-vein very slightly curved, very slanting, forming an acute angle, parted from the second by much more than its length: second straight, slightly slanting, forming a right angle, hardly half the length of the first; third very indistinctly curved, slanting, forming a slightly acute angle; fourth very slightly curved, forming a hardly acute angle, less slanting than the third, which it equals in length; fifth straight, upright, forming a right angle. Body tawny, very slender: head nearly as broad as the chest, adorned with three black spots which encircle the eyelets, and beneath with two black spots on each side of the face: the latter is broad, very convex, not prominent, adorned on each side with a black spot at the base of the feeler: mouth tawny with a black tip, reaching the hind-hips: eyes prominent: feelers black: fore-chest a little narrower in front than behind; scutcheon adorned with a yellow stripe, on each side of which are three black stripes, the inner pair are curved and interrupted, the other four are oblique and much excavated; hind-scutcheon narrow in the middle, rounded, much widened and adorned with a pitchy spot above the base of each fore-wing, slightly excavated on each side: scutcheon of the middle chest mostly yellow, on which colour the usual four obconical stripes are indistinctly traced in a ferruginous hue, the inner pair much shorter than the outer pair, and succeeded by a ferruginous spot which rests on the cross-ridge; hind border slightly excavated: abdomen obconical, a little longer than the chest; horn large, with a pitchy tip: opercula none; tymbals pale tawny; drums very small, pale yellow: legs tawny; thighs mostly yellow; tips of the feet ferruginous; claws ferruginous, with black tips: fore-thighs armed with four black teeth, three of these are rather large and one small: wings colourless, long, narrow; a slight tawny tinge towards the tips of the fore-wings, where there is a small brown spot; fore border yellow as far as the brand, tawny from thence towards the tip; veins tawny, black towards the tips; fore-flaps gray, with a black vein along the fore border; hind-flaps gray

for a short distance from the base along the hind border. Length of the body 6 lines; of the wings 18 lines.

a. Brazil. From Mr. Mornay's collection.

#### 110. CICADA STIGMA, Fem.

*Nervus transversus* 1us rectus, subobliquus, angulum rectum fingens, 2o plus sexties ejus longitudine divisus; 2us ferè rectus, subobliquus, angulum subobtusum fingens, 1o multò longior; 3us rectus, obliquus, angulum subacutum fingens; 4us rectus, obliquus, angulum subacutum fingens, 3o longior.

Second marginal areolet nearly as long as the first: first cross-vein straight, slightly slanting, forming a right angle, parted from the second by more than six times its length; second nearly straight, slightly slanting, forming a slightly obtuse angle, much longer than the first: third straight, slanting, forming a slightly acute angle; fourth straight, slanting, forming a slightly acute angle, longer than the third; fifth straight, nearly upright, forming a hardly acute angle. Body ferruginous, clothed with pale hairs: head as broad as the fore-chest; a black spot on each side of the crown; face very convex and prominent, adorned on each side with a large black spot: mouth black, reaching the middle-hips: feelers black, stout, ferruginous at the base: eyes prominent: fore-chest a little narrower in front than behind: scutcheon adorned with two curved black stripes in the disk, blackish on each side; hind-scutcheon narrow in the middle, a little broader and extending beyond the scutcheon near the base of each fore-wing, straight on each side: scutcheon of the middle-chest adorned with five pitchy stripes; the middle one long and slender; the inner pair very short and slender; the outer pair long and broad; hind border not excavated: abdomen obconical, rather slender and tapering towards the tip, narrower and much longer than the chest: oviduct ferruginous: legs tawny; tips of the feet pitchy; tips of the claws black; fore-thighs and fore-shanks ferruginous; fore-thighs armed with three long stout teeth: wings colourless; a small brown spot near the tip of each fore-wing; fore border very convex near the base, bright tawny as far as the brand which is darker; veins tawny, black towards the tips. Length of the body  $5\frac{1}{2}$  lines; of the wings 15 lines.

a. Brazil. Presented by J. P. G. Smith, Esq.

111. *CICADA VIRIDULA*, Mas.

*Nervus transversus* 2us rectus, subobliquus, angulum rectum fignens; 3us subcurvus, obliquus, angulum rectum fignens, 2o longior; 4us rectus, valdè obliquus, angulum rectum fignens, 3o multò longior.

Second cross-vein straight, slightly slanting, forming a right angle; third very slightly curved, slanting, forming a right angle, longer than the second; fourth straight, very slanting, forming a right angle, much longer than the third; fifth straight, slightly slanting, forming a hardly acute angle. Body slender, bright velvety green, thinly clothed with golden hairs, as broad as the fore-chest; face very convex and prominent: mouth tawny with a black tip, reaching the middle hips: eyes prominent: feelers pitchy at the base: fore-chest hardly narrower in front than behind: scutcheon adorned on each side with a very large tawny spot; hind-scutcheon narrow in the middle, widened and extending a little beyond the scutcheon near the base of each fore-wing, nearly straight on each side: scutcheon of the middle chest adorned with a large tawny spot on each side, its hind border not excavated: abdomen tawny, slightly obconical, not longer than the chest, pale tawny near the base which is pitchy, mostly green on the disk and having a pitchy band near the tip which is hairy: opercula none: tymbals pale tawny; drums black, small, not far apart: legs pale tawny; fore-legs darker; fore-thighs armed with four stout teeth; middle and hind-shanks pale green; tips of the claws black: wings colourless, tinged with brown at the tips; fore border pale tawny: brands darker, large; veins dark tawny, black towards the tips: fore-flaps pale tawny; hind-flaps pale tawny at the base and along some part of the hind border; the disk of this part is pale brown, and it has a dark brown spot at the base. Length of the body  $4\frac{1}{2}$  lines; of the wings 12 lines.

112. *CICADA CINGULATA*.

*Cicada cingulata*, Oliv. *Enc. Méth.* v. 752, 26. *Gmel. Ed. Syst. Nat.* i. 3, 2096, 76.

*Tettigonia cingulata*, Fabr. *Syst. Ent.* 680, 9. *Sp. Ins.* ii. 320, 10. *Mant. Ins.* ii. 266, 11.

*a—f.* New Zealand. Presented by Dr. Sinclair.  
*g.* New Zealand. From M. Pelerin's collection.

## 113. CICA DA SERICIA, Mas et Fem.

*Nervus transversus* 1us subcurvus, ferè erectus, angulum subobtusum fingens, 2o plus quadruplò ejus longitudine divisus ; 2us subcurvus, ferè erectus, angulum subobtusum fingens, 1o multò longior ; 3us ferè erectus, obliquus, angulum acutum fingens ; 4us subcurvus, obliquus, angulum acutum fingens, 3o multò longior.

Second marginal areolet about three-fourths of the length of the first : first cross-vein slightly curved, nearly upright, forming a slightly obtuse angle, parted from the second by more than four times its length ; second slightly curved, nearly upright, forming a slightly obtuse angle, a little longer than the first ; third nearly straight, slanting, forming an acute angle ; fourth very slightly curved, slanting, forming an acute angle, much longer than the third ; fifth very slightly curved, slanting, forming an obtuse angle.

*Male*.—Body green, adorned with silky down : head rather small, narrower than the fore-chest, greenish tawny along the sides of the eyes, adorned with two black spots by the eyelets ; face convex, not very prominent, having above two black spots and in front a black forked stripe, on each side of which there is a tawny stripe : mouth tawny with a black tip, reaching the middle-hips : eyes prominent : feelers black : fore-chest adorned with a black spot on the hind border, and on each side with four black marks, two of these on the disk, four occupy the furrows, two are on the borders, and the spaces between them have a tawny tinge ; sides of the fore-chest widest by the base of the wings, thence linear as far as the fore-border where they are rounded : scutcheon of the middle chest with four oblique large black marks whose disks have sometimes a tawny tinge, and are more or less adorned with tawny net-work ; the middle pair are much shorter than the hind pair, and behind them are three black spots forming a triangle ; hind border hardly excavated : abdomen black, as long as the chest, adorned above with ferruginous and green bands which vary in size and number ; a broad greenish tawny stripe on each side beneath ; opercula very small ; tymbals whitish with tawny bands ; drums pale green, rather small, parted by a moderate interval : legs green ; fore-shanks towards the tips and feet pitchy ; claws black, tawny at the base ; fore-thighs armed with three stout black teeth : wings colourless ; veins and fore border green, black towards the tips ; flaps of the fore-wings brown with a black vein in front ; flaps of the hind wings colourless, their fore borders clouded with brown.

*Fem.*—Abdomen rather longer than the chest, adorned with a large green spot on each side near the tip: oviduct ferruginous.

Length of the body 7—10 lines; of the wings 23—30 lines.

*a—e.* New Zealand. Presented by Dr. Sinclair.

#### 114. *CICADA BASIFLAMMA*, Mas et Fem.

*Nervus transversus* 1us subcurvus aut ferè rectus, rix obliquus, angulum obtusum fingens, 2o plus duplò vel plus triplò ejus longitudine divisus; 2us subcurvus, subobliquus, angulum obtusum fingens, 1o longior; 3us ferè rectus, obliquus, angulum subacutum fingens; 4us subcurvus, obliquus, angulum acutum fingens, 3o nonnunquam longior.

Second marginal areolet more than three-fourths of the length of the first: first cross-vein nearly straight or slightly curved, slightly slanting or nearly upright, forming an obtuse or slightly obtuse angle, parted from the second by more than twice, or by more than thrice its length; second slightly curved, slightly slanting, forming an obtuse, or slightly obtuse angle, longer or much longer than the first; third nearly straight, slanting, forming a slightly acute angle; fourth very slightly curved, slanting, forming an acute angle, as long or longer than the third; fifth slightly curved, upright, forming a hardly acute angle.

*Male.*—Body black, dull, thickly clothed with black hairs: head a little narrower than the fore-chest; face very convex, rather prominent: mouth black, reaching the middle lips: eyes prominent: feelers black, stout: furrows of the scutcheon of the fore-chest dark red; hind-scutcheon narrow, slightly widened near the base of each fore-wing, deeply excavated and forming a tooth on each side: hind border of the scutcheon of the middle-chest dark red, very slightly excavated: abdomen obconical, a little longer than the chest: an interrupted red stripe on each side; horn at the tip small: opercula none; tymbals dark gray; drums very small, pitchy, with tawny borders, wide apart: legs pitchy: thighs tawny beneath; claws black, tawny at the base; fore-thighs black with bright tawny stripes, armed with four black teeth, three of these large, tawny towards the tips, the fourth very small: hind-shanks tawny towards the tips: wings colourless, bright pale tawny and marked with black at the base; fore border pitchy, dark red at the base: veins tawny, paler towards the tips, black towards the base; cross-veins black; first and second cross-veins and the intermediate longitudinal veins clouded with dark brown; veins of the hind-wings tawny, black towards the tips; cross-veins and three of the

longitudinal veins also black; flaps whitish at the base and along the hind border.

*Var. β.* Fore-chest and middle-chest each adorned with two oblique red stripes; hind-scutcheon mostly red: vein between the first and second cross-veins not clouded with brown; fore border red; one black longitudinal vein on the hind-wing.

*Var. γ.* Like *Var. β*: a red interrupted stripe in the middle of the fore-chest.

*Var. δ.* First and second cross-vein very slightly clouded with brown, the veins between them quite unclouded.

*Fem.*—Head adorned with three red marks in front and with three more behind: scutcheon of the fore-chest red with the exception of six black stripes; middle pair uniting and forming a large spot, the other four oblique: abdomen much longer than the chest, very pointed towards the tip; hind border of the segments red; last segment adorned with four red stripes, the inner pair slender, the outer pair very broad and irregular; under side red with a broad black stripe; legs red; thighs striped with black; fore-shanks and fore-feet black; tips of the hind-feet pitchy; middle-feet pitchy: wings bright red along the fore border for two-thirds of the length, pitchy thence towards the tips.

*Var. β.* The red marks on the body wanting excepting one tawny dot on the head, two in a line on the fore-chest, and one on each side of the scutcheon whose hind border is red: abdomen nearly all black excepting a pale red stripe on each side beneath.

Length of the body 9—12 lines; of the wings 24—27 lines.

*a, b.* Van Dieman's Land. Presented by R. Butler, Esq.

*c, d.* Van Dieman's Land. From Dr. Hooker's collection.

*e.* New Holland. From Mr. Shuckard's collection

*f.* New Holland.

#### 115. *CICADA MUTA.*

*Cicada muta*, *Oliv. Enc. Méth.*, v. 757, 48. *Gmel. Ed. Syst. Nat.* i. 3, 2098, 84.

*Tettigonia muta*, *Fabr. Syst. Ent.* 681, 17. *Sp. Ins.* ii. 322, 21. *Mant. Ins.* ii. 267, 26. *Ent. Syst.* iv. 26, 35. *Syst. Rhyn.* 43, 53.

*a—g.* New Zealand. Presented by Dr. Sinclair.

## 116. CICADA CUTORA, Fcm.

*Nervus transversus 1us curvus, erectus, angulum rectum fingens, 2o plus quadruplò ejus longitudine divisus; 2us curvus, subobliquus, angulum obtusum fingens, 1o multò longior; 3us subcurvus, obliquus, angulum rectum fingens; 4us rectus, angulum subacutum fingens, 3o obliquior et multò longior.*

Second marginal areolet nearly as long as the first: first cross-vein curved, upright, forming a right angle, parted from the second by much more than four times its length; second curved, slightly slanting, forming an obtuse angle, much longer than the first; third very slightly curved, slanting, forming a right angle; fourth straight, forming a slightly acute angle, more slanting and much longer than the third; fifth nearly straight, slightly slanting, forming a slightly obtuse angle. Body green, tinged with tawny: head much narrower than the chest, adorned with a short black band between the face and the eyelets; face slightly convex, not at all prominent: mouth tawny: eyes not prominent: feelers black: fore-chest narrower in front than behind; scutcheon adorned with two pale green slender parallel stripes which are close together; hind-scutcheon narrow in the middle, rounded and much widened above the base of the fore-wing, slightly convex and not excavated on each side: scutcheon of the middle-chest adorned with three broad tawny oblique stripes, the side pair longer than the middle one; hind border hardly excavated; abdomen obconical, longer than the chest: oviduct ferruginous, its tip black and serrated; legs tawny; thighs green, fore-thighs armed with three tawny black-tipped teeth, two long, one small: wings colourless; fore border red, pitchy towards the tip; veins tawny, black towards the tips; fore-flaps pale tawny; hind-flaps tinged with green at the base and along the middle-vein, tinged with brown along the fore border. Length of the body 10 lines; of the wings 27 lines.

## 117. CICADA MELANOPYGIA.

*Cicada melanopygia, Germ. Silb. Rev. Ent. ii. 59, 9.*

*a.* New Holland. Presented by the Earl of Derby.

*b—f.* New Holland.

118. *CICADA CONNEXA*, Mas.

*Nervus transversus* 1us subcurvus, obliquus, angulum obtusum fingens, 2o triplò ejus longitudine divisus; 2us subcurvus, obliquus, angulum valdè obtusum fingens, 1o longior; 3us fere rectus, obliquus, angulum subacutum fingens; 4us curvus, obliquus, angulum fere rectum fingens, 3i longitudine.

Second marginal areolet about five-sixths of the length of the first: first cross-vein slightly curved, slanting, forming an obtuse angle, parted from the second by thrice its length; second slightly curved, slanting, forming a very obtuse angle, longer than the first; third almost straight, slanting, forming a slightly acute angle; fourth curved, slanting, forming an almost right angle, as long as the third; fifth curved, very slightly slanting, forming a hardly acute angle. Body black, narrow, nearly linear: head and chest more or less adorned with ferruginous marks: head a little narrower than the fore-chest: eyes prominent: mouth black, reaching the hind-hips: feelers black: hind border of the middle-chest very slightly excavated: abdomen obconical, longer than the chest, adorned with a ferruginous stripe on each side beneath: drums small, tawny, black towards the base; opercula partly ferruginous: legs black; hips and thighs adorned with ferruginous stripes: fore-thighs armed with four teeth, of which three are large and one is small: wings colourless, red at the base; fore border dark ferruginous; veins ferruginous, black towards the tips; first and second cross-veins and the vein between them clouded with dark brown: flaps pale buff towards the base. Length of the body 10 lines: of the wings 27 lines.

*a, b.* New Holland.

119. *CICADA MARGINATA*.

*Tettigonia marginata*, Leach, *Zool. Misc.* i. 89, Pl. 39, f. 1.

*a.* New Holland. Presented by the Entomological Club.

*b.* Van Dieman's Land. Presented by R. Butler, Esq.

*c, d.* New Holland. From Mr. Shuckard's collection.

*e.* New Holland.



## 120. CICADA ENCAUSTICA.

*Cicada encaustica*, Germ. Silb. Rev. Ent. ii. 62, 15.

*a*—*c*. New Holland. Presented by the Earl of Derby.

*d*. New Holland. Presented by the Haslar Hospital.

*e*—*m*. New Holland.

## 121 CICADA ANGUSTA.

*Nervus transversus* *1us subcurvus ferè erectus, angulum obtusum* *figens, 2o quadruplò ejus longitudine divisus; 2us subcurvus,* *obliquus, angulum valdè obtusum figens, 1o longior; 3us sub-* *undatus, obliquus, angulum acutum figens; 4us subcurvus,* *obliquus, angulum acutum figens, 3o rix brevior.*

Second marginal arcolet about five-sixths of the length of the first: first cross-vein very slightly curved, nearly upright, forming an obtuse angle, parted from the second by about four times its length; second slightly curved, slanting, forming a very obtuse angle, longer than the first; third very slightly waved, slanting, forming an acute angle; fourth very slightly curved, slanting, forming an acute angle, nearly as long as the third; fifth very slightly curved, nearly upright, forming a right angle. Much like *C. Rosea*, but narrower: body tawny, very hairy: head small, a little narrower than the fore-chest; disks of the crown and of the face mostly black: eyes rather prominent: mouth tawny with a black tip, reaching the middle-hips: feelers black, stout: fore-chest adorned with three yellow stripes; the side pairs irregular and oblique; sides very slightly excavated in the middle part, slightly convex in front and behind; hind-scutcheon rather narrow in the middle: scutcheon of the middle-chest adorned with two very large black obconical marks, and between each of these and the side there is an oblique black stripe; hind border hardly excavated: abdomen obconical, much longer than the chest, black above excepting the tip and the hind borders of the segments; a stripe of pale hairs extends along the back; under side with a broad short pitchy stripe in the disk: opercula none; tymbals white; drums whitish, of moderate size, almost meeting beneath, nearly one-third of the length of the abdomen: legs pale tawny; thighs streaked with black; tips of the claws black; fore-thighs armed with three black teeth: wings colourless; veins pale tawny, darker along the fore border, marked with black at the base, black at the tips; flaps colourless. Length of the body 8 lines; of the wings 22 lines.

*a*. ——— ? From Mr. Earl's collection.

## 122. CICADA INTERRUPTA.

*Nervus transversus 1us subcurvus, obliquus, angulum valdè obtusum fingens, 2o plus duplò ejus longitudine dirisus; 2us subcurvus, valdè obliquus, angulum perobtusum fingens, 1o paulullò brevior; 3us ferè rectus, obliquus, angulum subobtusum fingens; 4us ferè rectus, obliquus, angulum obtusum fingens, 3o longior.*

Second marginal areolet full three-fourths of the length of the first: first cross-vein very slightly curved, slanting, forming a very obtuse angle, parted from the second by much more than twice its length; second very slightly curved, very slanting, forming an extremely obtuse angle, a little shorter than the first; third nearly straight, slanting, forming a slightly obtuse angle; fourth almost straight, slanting, forming an obtuse angle, longer than the third; fifth very slightly curved, nearly upright, forming a hardly acute angle. Body pitchy, almost hairless: head a little broader than the fore-chest, adorned with two tawny spots on the hind border near the eyelets; face very slightly convex, not at all prominent, adorned above with a tawny spot and in front with a tawny stripe: mouth tawny with a pitchy tip, reaching the hind-hips: eyes prominent: feelers black: fore-chest rather short, tawny, with pitchy spots on each side of the furrows; hind-scutcheon tawny along the hind border, extending at the base of each fore-wing beyond the sides of the scutcheon, slightly serrated and hardly convex on each side: scutcheon of the middle-chest ferruginous along each side, adorned with one ferruginous and two tawny stripes, the latter are straight and longer than the former; cross-ridge tawny; hind border slightly excavated: abdomen obconical, longer than the chest, ferruginous beneath; hind borders of the segments ferruginous: opercula very small, partly covering the tymbals which are tawny; drums rather small, pitchy, hardly apart: legs pitchy; knees and tips of the hips tawny; shanks and feet ferruginous; claws ferruginous with black tips; fore-thighs striped with tawny, armed with three teeth, one large and oblique, one of moderate size, and one very small: wings colourless, long and narrow, yellow at the base and along the fore border; veins yellow, tawny towards the base and towards the tips, black at the tip of the primitive areolet, and at the base of the first, second and third discoidal areolets; a slender zigzag brown band extends from near the tip where it embraces the first marginal areolet, and clouds the cross-veins from the first to the fourth, it is there interrupted but appears again on the fifth; fore-flaps pale tawny; veins of the hind-wings yellow; flaps pale tawny at the base, for a

space along the hind border and more slightly at the tip of the fore border. Length of the body 8 lines; of the wings 22 lines.

a. New Holland. From Mr. Dring's collection.

### 123. CICALA CRUENTATA.

*Cicala cruentata*, Oliv. *Enc. Méth.* v. 752, 28. *Gmel. Ed. Syst. Nat.* i. 3, 2096, 78.

*Tettigonia cruentata*, Fabr. *Syst. Ent.* 680, 10. *Sp. Ins.* ii. 320, 12. *Mant. Ins.* ii. 267, 16. *Ent. Syst.* iv. 22, 19. *Syst. Rhyn.* 39, 29.

### 124. CICALA JUNCTA, Fern.

*Nervus transversus* 1us subcurvus, subobliquus, angulum obtusum fingens, 2o plus duplò ejus longitudine divisus; 2us fere rectus, subobliquus, angulum obtusum fingens, 1o multò longior; 3us vix undatus, obliquus, angulum subacutum fingens; 4us subcurvus, obliquus, angulum subacutum fingens, 3o longior.

Second marginal areolet about three-fourths of the length of the first: first cross-vein slightly curved, slightly slanting, forming an obtuse angle, parted from the second by much more than twice its length; second nearly straight, slightly slanting, forming an obtuse angle, much longer than the first; third hardly waved, slanting, forming a slightly acute angle; fourth slightly curved, slanting, forming a very slightly acute angle, longer than the third; fifth slightly curved, nearly upright, forming a right angle. Body slender, green with a slight tawny tinge: head nearly as broad as the fore-chest; face convex: mouth green with a pitchy tip, reaching the middle-shanks: eyes not prominent: feelers tawny: hind scutcheon of the fore-chest narrow in the middle, rounded and much widened at the base of each fore-wing, excavated on each side: scutcheon of the middle-chest adorned with two indistinct, tawny, obconical stripes; hind border very slightly excavated: abdomen oblanceolate, very much longer than the chest: oviduct ferruginous: legs green; tips of the claws black; fore-thighs armed with three large teeth whose tips are black: wings colourless; fore border green; veins green, tawny towards the tips; fore-flaps pale tawny. Length of the body 7 lines; of the wings 18 lines.

a. ———?

## 125. CICADA CONNEXA, Fem.

*Nervus transversus* 1us subcurvus, obliquus, angulum valdè obtusum fingens, 2o plus duplò ejus longitudine divisus; 2us subcurvus, subobliquus, angulum obtusum fingens, 1i dimidio paullo brevior; 3us ferè rectus, obliquus, angulum subacutum fingens; 4us subcurvus, obliquus, angulum subacutum fingens; 3o longior.

Second marginal areolet a little shorter than the first: first cross-vein very slightly curved, slanting, forming a very obtuse angle, parted from the second by a little more than twice its length; second very slightly curved, slightly slanting, forming an obtuse angle, a little less than half the length of the first; third nearly straight, slanting, forming a slightly acute angle; fourth slightly curved, slanting, forming a slightly acute angle, longer than the third; fifth slightly curved, upright, forming a nearly right angle. Body pale green with a slight tawny tinge: head nearly as broad as the fore-chest; face slightly convex: mouth tawny with a black tip, reaching the middle hips: eyes rather prominent: feelers tawny: hind-scutcheon of the fore-chest narrow above, rounded and slightly widened at the base of each fore-wing: scutcheon of the middle-chest adorned with four indistinct obconical tawny stripes; hind border hardly excavated: abdomen oblanceolate, full twice the length of the chest: oviduct tawny: legs green; hips and thighs adorned with tawny stripes; tips of the claws black; fore-feet tawny with pitchy tips; fore-thighs armed with three long teeth whose tips are black: wings colourless; veins green, dark tawny towards the tips; fore border green; fore-flaps pale tawny. Length of the body 6 lines; of the wings 16 lines.

## 126. CICADA THEMISCURA, MAs.

*Nervus transversus* 1us ferè erectus, subobliquus, angulum obtusum fingens, 2o quinquies ejus longitudine divisus; 2us subcurvus, subobliquus, angulum obtusum fingens, 1o duplò longior; 3us ferè rectus, obliquus, angulum subacutum fingens; 4us subcurvus, obliquus, angulum acutum fingens, 3o multò longior.

Second marginal arcelet more than three-fourths of the length of the first: first cross-vein almost straight, slightly slanting, forming an obtuse angle, parted from the second by five times its length; second slightly curved, slightly slanting, forming an obtuse angle,

full twice the length of the first; third nearly straight, slanting, forming a very slightly acute angle; fourth very slightly curved, slanting, forming an acute angle, very much longer than the third; fifth almost straight, upright, forming a slightly obtuse angle. Body black, narrow, partly clothed with whitish shining down: head hardly as broad as the fore-chest, adorned with a yellow triangular spot which rests on the hind border and is partly between the eyelets; face slightly convex, not at all prominent, adorned with a red stripe on each side and in front: mouth black, red towards the base, reaching the middle hips: eyes very prominent: feelers black, stout: fore-chest rather short, a little narrower in front than behind; scutcheon adorned with a red fore-border; hind-scutcheon red, narrow, black along the fore border, rounded and widened at the base of each fore-wing, not excavated on each side: scutcheon of the middle chest red, rather long, adorned with four very broad obconical black stripes, the outer pair much longer than the inner pair which are succeeded by a large conical black spot resting on the cross ridge; hind border very slightly excavated: abdomen obconical, very much longer than the chest; hind borders of the segments red; tip tawny: under side red, adorned with a black stripe which is widened towards the tip: opercula none; tymbals hoary; drums very small, tawny, black towards the base, very wide apart: legs red; fore-thighs armed with three red teeth, two of which are very long, the third very small: wings colourless; veins pale red, black towards the tips, tawny at the base; fore border tawny as far as the brand, ferruginous from thence towards the tip; fore-membranes tawny; flaps tawny along the middle-vein and having a very small brown spot at the tip of the fore border. Length of the body 8 lines; of the wings 23 lines.

a. ——— ?

#### 127. CICALA DAMATER, Mas.

*Nervus transversus* 1us rectus, ferè erectus, angulum subobtusum fingens, 2o triplè ejus longitudine divisus; 2us subcurvus, subobliquus, angulum obtusum fingens, 1o longior; 3us subrectus, obliquus, angulum rix acutum fingens; 4us subcurvus, obliquus, angulum acutum fingens, 3o longior.

Second marginal arcelet nearly as long as the first: first cross-vein straight, nearly upright, forming a slightly obtuse angle, parted from the second by thrice its length; second very slightly curved, slightly slanting, forming an obtuse angle, longer than the first; third nearly straight, slanting, forming a hardly acute angle; fourth

very slightly curved, slanting, forming an acute angle, longer than the third; fifth slightly curved, upright, forming a right angle. Body black, narrow: head nearly as broad as the fore-chest; a very small tawny spot between the eyelets; face convex, not prominent, adorned in front with a tawny border: mouth tawny with a black tip, reaching the hind-hips: feelers black: eyes rather prominent: fore-chest very little narrower before than behind; scutcheon adorned with six red stripes, the middle pair slightly curved, narrower than the other four, of which the outer pair are nearly triangular; hind-scutcheon wrinkled, narrow, rounded, slightly widened and reddish on the hind border above the base of each fore-wing, much indented and armed with a stout tooth on each side: scutcheon of the middle-chest dark red on each side and on the hind border which is slightly excavated: abdomen obconical, longer than the chest; under side dark red at the tip, across the base, and on each side of the hind borders of the segments: drums small, tawny, black at the base, some distance apart: legs black, clothed with short white hairs; thighs adorned with pale red stripes: claws dark red, black towards the tips: middle-shanks pitchy with pale red stripes, adorned with a tawny band near the base: hind-shanks dull red, tawny at the tips, adorned with a tawny band near the base which is pitchy: fore-thighs armed with three ferruginous teeth, which are black towards the base, two very large, the third small: hind-feet red, darker at the base and at the tips: wings colourless; fore border dark red as far as the brand, pitchy with dark red streaks from thence towards the tip; veins dark red, black towards the tips; first and second cross-veins clouded with brown; veins of the hind-wings tawny, black towards the tips; flaps mostly white. Length of the body  $7\frac{1}{2}$  lines; of the wings 21 lines.

a. New Holland.

#### 128. CICADA MELETE, Mas et Fem.

*Nervus transversus* 1us ferè rectus, subobliquus, angulum obtusum fingens, 2o quadruplò ejus longitudine divisus; 2us subcurvus, subobliquus, angulum obtusum fingens, 1i longitudine; 3us rix undatus, obliquus, angulum acutum fingens; 4us rix undatus, obliquus, angulum acutum fingens, 1o paullò longior.

Second marginal areolet much more than three-fourths of the length of the first: first cross-vein almost straight, slightly slanting, forming an obtuse angle, parted from the second by four times its length; second slightly curved, slightly slanting, forming an obtuse

angle, as long as the first; third very indistinctly waved, slanting, forming an acute angle; fourth very indistinctly waved, slanting, forming an acute angle, a little longer than the third; fifth slightly curved, nearly upright, forming a right angle.

*Male*.—Body black, rather narrow: head nearly as broad as the fore-chest, adorned with three red spots along the hind border and in front with a red band which sends forth a red stripe to the middle eyelet, and has three red stripes in front, of these the middle one is short and adorns the face, the side pair are long, and extend by each side of the face to the mouth; face convex, not prominent: mouth pitchy, extending to the middle-hips: eyes prominent: feelers black: fore-chest a little narrower in front than behind: scutcheon bordered with red, its furrows dark red, with which the intervening spaces are also partly adorned; hind-scutcheon narrow in the middle, convex and much widened at the base of each fore-wing, much excavated on each side: scutcheon of the middle-chest red on each side and behind, adorned with two slender red stripes which join the cross-ridge, the latter is also mostly red; hind border slightly excavated: abdomen obconical, a little longer than the chest, adorned with a red band which is much narrower above than beneath where it has a row of black dots on each side, and a more slight row in the middle; tip red: drums small, pitchy or black, parted by a broad interval: legs red; hips and thighs black with red tips; fore-hips and fore-thighs streaked with red; fore-shanks, fore-feet and middle-feet black; fore-thighs armed with two long black teeth which have each a red band near the tip; middle-shanks black, red for one-third of the length from the base; a black spot at the base of each hind-shank: wings colourless; veins black, ferruginous towards the base, whitish beneath the fore border which is black as far as the brand, and brown from thence towards the tip; brands whitish.

*Female*.—Abdomen red beneath with a row of black spots on each side; last segment black, with a large red spot on each side: oviduct ferruginous.

Length of the body 9 lines; of the wings 24 lines.

*a.* New Holland. Presented by the Haslar Hospital.

*b—d.* Swan River. Presented by Sir J. Richardson.

## 129. CICADA AÆDE, Fem.

*Nervus transversus* 1us ferè rectus, ferè erectus, angulum rectum fingens, 2o plus duplò ejus longitudine divisus; 2us curvus, erectus, angulum subobtusum fingens, 1o paullò longior; 3us subcurvus, obliquus, angulum acutum fingens; 4us ferè rectus, subobliquus, angulum subacutum fingens, 3o brevior.

Second marginal areolet much more than three-fourths of the length of the first: first cross-vein almost straight, nearly upright, forming a right angle, parted from the second by more than twice its length; second curved, upright, forming a very slightly obtuse angle, a little longer than the first; third very slightly curved, slanting, forming an acute angle; fourth almost straight, slightly slanting, forming a very slightly acute angle, shorter than the third; fifth slightly curved, upright, forming a hardly acute angle. Very nearly allied to *C. Melete*, but a little narrower: body black: head a little narrower than the fore-chest; face very convex, adorned with a dark red spot on each side; an interrupted tawny stripe on the crown corresponding to a short tawny stripe on the fore-chest: mouth and feelers black: eyes prominent: structure of the fore-chest like that in *C. Melete*; hind-scutcheon much wrinkled: a large tawny spot on each side of the cross-ridge on the scutcheon of the middle-chest, whose hind border is slightly excavated: abdomen obconical, much longer than the chest, adorned with a narrow red band; under side and tip red, the latter with two black stripes: oviduct dark red: legs black; knees and tips of the shanks tawny; fore-thighs striped with tawny, armed with two long black teeth; hind-shanks tawny with black tips; hind-feet tawny: wings colourless; fore border black, brown beyond the band which is whitish; veins black, tawny at the base, whitish beneath the fore border. Length of the body 9 lines; of the wings 24 lines.

a. Adelaide. Presented by the Entomological Club.

## 130. CICADA MNEME, Mas et Fem.

*Nervus transversus* 1us subcurvus, subobliquus, angulum obtusum fingens, 2o ferè quadruplò ejus longitudine divisus; 2us subcurvus, obliquus, angulum valdè obtusum fingens, 1o multò longior; 3us curvus, obliquus, angulum ferè rectum fingens; 4us curvus, obliquus, angulum vix acutum fingens, 3o longior.

Second marginal areolet full three-fourths of the length of the first: first cross-vein very slightly curved, slightly slanting, forming



an obtuse angle, parted from the second by nearly four times its length; second slightly curved, slanting, forming a very obtuse angle, very much longer than the first; third curved, slanting, forming an almost right angle; fourth curved, slanting, forming a hardly acute angle, longer than the third; fifth very slightly curved, upright, forming a hardly obtuse angle.

*Male*.—Body black: head and chest clothed with short black hairs: head hardly narrower than the fore-chest, adorned with a slender interrupted tawny stripe; face slightly convex, not at all prominent, red on each side in front: eyes rather prominent: feelers black, stout: fore-chest a little narrower before than behind; scutcheon adorned with a red slender stripe which does not reach the hind border; hind-scutcheon narrow above, broader and rounded at the base of each fore-wing, somewhat excavated along each side: sides, cross-ridge and hind border of the scutcheon of the middle-chest tinged with red; hind border very slightly excavated: abdomen obconical, a little longer than the chest, adorned with whitish shining down; hind borders of the segments, tip and under side bright red: opercula none; tymbals green; drums very small, dark red, blackish towards the base, wide apart: legs black, rather hairy; fore-thighs streaked with red, armed with three long black teeth whose tips are dark red; knees red; a tawny band near the base of each of the four hinder shanks; hind-shafts tawny beneath towards the tips; hind-feet pale tawny with black tips: wing colourless; fore border dark red, rather convex; veins black, tawny and marked with black at the base; fore-flaps grayish; hind-flaps brown at the base and along some part of the hind-border and at the tips.

*Fem*.—Abdomen a little longer than that of the male; last segment red with the exception of two black stripes which diverge towards the tip: oviduct red.

Length of the body 8—9 lines; of the wings 25—26 lines.

*a, b.*

### 131. CICA DA ANTICA, Mas.

*Nervus transversus* 1us rectus, erectus, angulum obtusum fingens, 2o sexties ejus longitudine divisus; 2us subcurvus, obliquus, angulum valde obtusum fingens, 1o longior; 3us fere rectus, obliquus, angulum fere rectum fingens; 4us subcurvus, obliquus, angulum rectum fingens, 3o multo longior.

Second marginal areolet much more than three-fourths of the length of the first: first cross-vein straight, upright, forming an ob-

tuse angle, parted from the second by six times its length; second very slightly curved, slanting, forming a very obtuse angle, longer than the first; third nearly straight, slanting, forming an almost right angle; fourth very slightly curved, slanting, forming a right angle, much longer than the third; fifth very slightly curved, nearly upright, forming a hardly acute angle. The description of *C. Mneme* will apply also to this species, but there is a difference in the structure of the wing-veins. Length of the body 10 lines: of the wings 22 lines.

### 132. CICADA LATOREA, Mas.

*Nervus transversus* 2us subcurvus, subobliquus, angulum obtusum fingens, 1o paullo longior; 3us subcurvus, obliquus, angulum subacutum fingens; 4us fere rectus, obliquus, angulum acutum fingens, 3o brevior.

Second marginal areolet as long as three-fourths of the first: first cross-vein in both wings of the insect described forming of itself a right angle, whence proceeds an additional longitudinal vein which divides the second marginal areolet; second slightly curved, very slightly slanting, forming an obtuse angle, a little longer than the first, and parted from it by full thrice its length; third hardly curved, slanting, forming a slightly acute angle; fourth nearly straight, slanting, forming an acute angle, shorter than the third; fifth curved, upright, forming a nearly right angle. In both wings of the insect described an additional slanting cross-vein divides the front areolet, and in the left wing there is an additional cross-vein near the base of the sixth marginal areolet. Body black: head a little narrower than the fore-chest; crown adorned with an interrupted tawny stripe, and on each side with a tawny spot; face slightly convex, adorned with an irregular tawny band, before which there is a small tawny spot, and the sides in front are also tawny: mouth dark red with a black tip reaching the middle lips: eyes prominent: feelers black: fore-chest a little narrower in front than behind; scutcheon tawny along the fore border, adorned with six oblique tawny stripes; hind-scutcheon partly tawny, narrow, rounded and slightly widened above the base of each fore-wing, excavated on each side: scutcheon of the middle chest tawny, adorned with four broad black obconical stripes; the inner pair much shorter than the outer pair, united towards the base; furrows mostly black along the hind border which is not excavated: abdomen obconical, a little longer and narrower than the chest; hind borders of the segments

mostly red ; under side adorned with two yellow stripes which taper from the base and do not extend much beyond half the length : opercula none ; tymbals hoary ; drums yellow, of moderate size, not far apart, more than one-third of the length of the abdomen : legs black ; thighs and fore-hips adorned with tawny stripes ; a tawny band on the base of each shank ; four hinder-shanks pitchy, tawny beneath at the tips ; claws dark red, partly pitchy ; hind-feet adorned with a tawny band ; fore-thighs armed with three black teeth whose tips are ferruginous, one is large, the other two small : wings colourless ; fore border dark tawny, pitchy beyond the brand ; veins ferruginous, black towards the tips : fore-flaps tawny ; hind-flaps white at the base and on the hind border and along the middle-vein. In the insect described the first marginal arcelet is divided longitudinally in both wings, and in the left wing the fifth marginal arcelet has near its base a little cross-vein which forms a pentagonal arcelet. Length of the body  $7\frac{1}{2}$  lines ; of the wings  $19\frac{1}{2}$  lines.

a. New Holland. Presented by the Haslar Hospital.

### 133. CICADA ARCEUS, MAS.

*Nervus transversus* 1us curvus, subobliquus, angulum subobtusum fingens, 2o plus triplò ejus longitudine divisus ; 2us subcurvus, obliquus, angulum obtusum fingens, 1o longior ; 3us ferè rectus, subobliquus, angulum rectum fingens ; 4us subcurvus, obliquus, angulum acutum fingens, 3o multò longior.

Second marginal arcelet as long as three-fourths of the first : first cross-vein curved, slightly slanting, forming a very slightly obtuse angle, parted from the second by much more than thrice its length ; second slightly curved, slanting, forming an obtuse angle, longer than the first ; third almost straight, slightly slanting, forming a right angle ; fourth slightly curved, slanting, forming an acute angle, very much longer than the third : fifth very slightly curved, upright, forming a nearly right angle. Body black, very slender : head near as broad as the fore-chest, adorned with a dark red spot on each side at the base of the feelers ; a small triangular tawny spot between the eyelets ; face slightly convex, not at all prominent : mouth black, adorned with a tawny band near the base, reaching the middle hips : eyes very prominent : feelers black : fore-chest a little narrower in front than behind ; hind-scutcheon narrow in the middle, tawny along the hind border, rounded and much widened at the base of each fore-wing, excavated on each side, adorned with a red spot towards the fore border : scutcheon of the middle-chest adorned with two slender, slightly angular tawny stripes, which have

the fore angle inward and the hind angle outward; sides, cross-ridge and hind border also tawny, the latter slightly excavated: abdomen obconical, a little narrower and very much longer than the chest, tawny at the tip: hind borders of the segments mostly tawny: drums black with tawny borders, extremely small, far apart: legs black; thighs and fore-hips adorned with tawny stripes; four hinder knees tawny; fore-thighs armed with three black teeth, two large and one small; middle-shanks pitchy with a tawny band near the base; four hinder feet pitchy with a tawny band in the middle; hind-shanks pale tawny, pitchy at the base and at the tips, beset with pitchy spines whose tips are ferruginous: wings colourless; fore borders pitchy, inclosing a yellow stripe which extends as far as the yellow brand; veins black, tawny towards the base. Length of the body 7 lines; of the wings 18 lines.

a. New Holland. Presented by the Entomological Club.

### 134. *CICADA MULTIFASCIA*, Mas.

*Nervus transversus* 1us *ferè rectus, suberectus, angulum obtusum* *figens*, 2o *ferè triplò ejus longitudine divisus*; 2us *subcurvus, ferè erectus, angulum obtusum figens*, 1o *paullò longior*; 3us *vix undatus, obliquus, angulum acutum figens*; 4us *ferè rectus, obliquus, angulum acutum figens*, 3o *paullò brevior*.

Second marginal arcelet three-fourths of the length of the first: first cross-vein nearly straight, almost upright, forming an obtuse angle, parted from the second by nearly thrice its length; second slightly curved, nearly upright, forming an obtuse angle, a little longer than the first; third very indistinctly waved, slanting, forming an acute angle; fourth nearly straight, a little shorter, rather less slanting and forming a less acute angle than the third; fifth slightly curved, upright, forming a right angle. Body black, slender: head as broad as the fore-chest; face slightly convex, not at all prominent: mouth black, reaching near to the hind-hips: eyes prominent: feelers black: structure of the chest like that of *C. rufifascia*: sides and hind border of the scutcheon of the middle-chest red: abdomen oblanccolate, near twice the length of the chest, longer than that of *C. rufifascia*; hind borders of the segments adorned with narrow bright red bands which are mostly entire; a broad red partly interrupted band on the penultimate segment; last segment black above, with a forked red mark on each side; under side red: legs pale red; thighs striped with black; feet and fore-shanks dark red; fore-thighs armed with three long black teeth: wings colourless; fore border pale red as far as the brand, dark

tawny with a red streak from thence till near the tip; veins black, tawny at the base; fore-membranes red; flaps pale red at the base and along the veins. Length of the body 5—6 lines; of the wings 15—16 lines.

a. Adelaide. Presented by the Entomological Club.

b. New Holland.

### 135. CICALA SINGULA, Fem.

*Nervus transversus* 1us ferè rectus, erectus, angulum subobtusum fingens, 2o plus triplò ejus longitudine divisus; 2us ferè rectus, subobliquus, angulum obtusum fingens, 1o paullò longior; 3us vir undatus, obliquus, angulum subacutum fingens; 4us subcurvus, obliquus, angulum acutum fingens, 3o longior.

Second marginal arcole three-fourths of the length of the first: first cross-vein almost straight, upright, forming a slightly obtuse angle, parted from the second by more than thrice its length; second almost straight, slightly slanting, forming an obtuse angle, a little longer than the first; third hardly waved, slanting, forming a slightly acute angle; fourth slightly curved, slanting, forming an acute angle, longer than the third; fifth very slightly curved, nearly upright, forming a hardly acute angle. Body black, like that of *C. multifascia* in shape: head dark red, a little broader than the fore-chest; face black, slightly convex, not all prominent: mouth dark red, reaching near the hind-hips: eyes prominent: feelers pitchy with whitish tips: fore-chest linear, adorned with a dark red stripe which is widened in front and behind; hind-scutcheon dark red, narrow above, broader on each side where it extends beyond the scutcheon: scutcheon of the middle-chest adorned with two dark red parallel stripes; sides dark red; hind border pale tawny, hardly excavated: abdomen oblanccolate, nearly twice the length of the chest, pale red beneath; hind borders of the segments adorned with narrow entire tawny bands which are wider on each side than in the middle; band of the penultimate segment broad but partly interrupted; last segment tawny, adorned with two black stripes which in front are continued across to the sides of the abdomen, and are united behind to a slender black stripe which runs between and extends to the tip: legs tawny; thighs dark tawny; tips of the claws black; fore-legs ferruginous; fore-thighs armed with three long pitchy teeth: wings colourless; fore border pale red; veins pitchy, tawny towards the base; fore membranes tawny; flaps tawny at the base and along the middle vein. The specimen described may be immature. Length of the body 6 lines; of the wings 16 lines.

a. ———?

## 136. CICADA OBSCURIOR, Mas.

*Nervus transversus* 1us subcurvus, erectus, angulum obtusum fingens, 2o plus duplò ejus longitudine divisus; 2us vix curvus, ferè erectus, angulum obtusum fingens, 1o longior; 3us vix curvus, obliquus, angulum subacutum fingens, 3o brevior.

Second marginal areolet almost as long as the first: first cross-vein hardly curved, upright, forming an obtuse angle, parted from the second by much more than twice its length; second hardly curved, nearly upright, longer than the first, and forming a more obtuse angle; third hardly curved, slanting, forming an acute angle; fourth nearly straight, slanting, forming a slightly acute angle, shorter than the third; fifth slightly curved, upright, forming a right angle. Body black: head and chest a little broader than those of *C. rufifascia* and of *C. multifascia*: head as broad as the fore-chest, adorned with an indistinct reddish mark between the eyelets and another on the face, which is convex but not prominent, and has a tawny mark in front and a tawny stripe along each of its sides: mouth black, reaching the hind-hips: eyes prominent: feelers black: sides and hind border of the scutcheon of the middle-chest dark red; hind border not excavated: abdomen very little longer than the chest, rather broader than that of *C. rufifascia*; hind borders of the second and following segments red; under side tawny with three pitchy stripes: opercula none; tymbals dark gray; drums pale yellow, very small, parted by a broad interval: legs black; fore-thighs streaked with dark red, armed with three long black teeth; knees reddish; a tawny band near the base of each middle-shank; hind-shanks pitchy, tawny towards the tips, adorned with a tawny band near the base; hind-feet pitchy with a tawny band: wings colourless; fore border dark red along the whole length; veins black; fore-membranes dull pale tawny; flaps colourless, dull pale tawny at the base and along the middle vein. Length of the body 6 lines; of the wings 15 lines.

## 137. CICADA INCEPTA, Mas et Fenn.

*Nervus transversus* 1us ferè rectus, suberectus, angulum obtusum fingens, 2o ferè quadruplò ejus longitudine divisus; 2us subcurvus ferè erectus, angulum obtusum fingens, 1i longitudine; 3us vix undatus, obliquus, angulum acutum fingens; 4us subcurvus, obliquus, angulum acutum fingens, 3o vix longior.

Second marginal areolet full three-fourths of the length of the first: first cross-vein almost straight, nearly upright, forming an

obtuse angle, parted from the second by nearly four times its length; second very slightly curved, nearly upright, forming an obtuse angle, as long as the first; third hardly waved, slanting, forming an acute angle; fourth very slightly curved, slanting, forming an acute angle, hardly longer than the third; fifth very slightly curved, upright, forming a hardly obtuse angle. Body slender, black: head very little broader than the fore-chest, adorned with some pale red marks; face rather prominent, mostly red: eyes prominent: feelers black, stout: mouth pale red with a black tip, reaching beyond the middle-lips: fore-chest more or less adorned with pale red marks: hind-scutcheon rather narrow above, slightly widened and angular on each side: middle-chest adorned with some pale red marks; cross-ridge pale red; hind border slightly excavated: abdomen ob lanceolate, longer than the chest, red beneath except the tip, more or less adorned above with red bands which are partly interrupted on the back; tymbals very small: legs red, striped with black; fore-thighs armed with two large and with two small teeth: wings colourless, long and narrow; fore border pale red as far as the brand which is pale brown. Length of the body  $6\frac{1}{2}$ — $7\frac{1}{2}$  lines; of the wings 20—22 lines.

*a, b.* Adelaide. Presented by the Entomological Club.

### 138. CICADA JUVENIS, Mas.

*Nervus transversus* 1us *ferè rectus, suberectus, angulum subobtusum* *figens*, 2o *plus quadruplò ejus longitudine divisus*; 2us *subcurvus, subobliquus, angulum obtusum figens*, 1o *multò longior*; 3us *ferè rectus, obliquus, angulum subacutum figens*; 4us *subcurvus, obliquus, angulum subacutum figens*, 3o *multò longior*.

Second marginal areolet nearly as long as the first: first cross-vein almost straight, nearly upright, forming a slightly obtuse angle, parted from the second by much more than four times its length; second very slightly curved, slightly slanting, forming an obtuse angle, very much longer than the first; third nearly straight, slanting, forming a very slightly acute angle; fourth very slightly curved, slanting, forming a very slightly acute angle, much longer than the third; fifth very slightly curved, nearly upright, forming a slightly obtuse angle. Body black, clothed with hoary hairs: head as broad as the fore-chest, adorned with a red mark in front; face convex, red on each side in front: mouth red with a black tip, reaching the middle-lips: eyes prominent: feelers black: fore-chest not narrower in front; scutcheon adorned with a red stripe which does not reach

the red hind border; hind-scutcheon narrow and adorned with a red band above, slightly widened on each side: scutcheon of the middle-chest adorned with a narrow red border and with two red stripes; hind border slightly excavated; abdomen tapering from the base to the tip, much longer than the chest, brown on each side towards the base beneath; hind borders of the segments red; drums very small, far apart, pale yellow, their disks black: legs black, clothed with short hoary and black hairs, adorned with red stripes; claws red; fore-thighs armed with rather long black teeth; hind-shanks beset with red spines: wings colourless, yellow at the base and along the fore border; veins red, black towards the tips; tips of the flaps clouded with black. Length of the body  $7\frac{1}{2}$  lines; of the wings 24 lines.

a. Port Stephen, New Holland. Presented by the Earl of Derby.

### 139. CICADA INCIPIENS, Fem.

*Nervus transversus* 1us rectus, erectus, angulum subobtusum fignens, 2o plus duplò ejus longitudine divisus; 2us subcurvus, fere erectus, angulum obtusum fignens, 1o paulò longior; 3us subcurvus, valde obliquus, angulum acutum fignens; 4us fere rectus, obliquus, angulum rectum fignens, 3i dimidio brevior.

Second marginal areolet full three-fourths of the length of the first: first cross-vein straight, upright, forming a slightly obtuse angle, parted from the second by much more than twice its length; second very slightly curved, nearly upright, forming an obtuse angle, a little longer than the first; third very slightly curved, very slanting, forming an acute angle; fourth almost straight, slanting, forming a right angle, not half the length of the third; fifth very slightly curved, upright, forming a slightly obtuse angle. Body black, rather short: head fully as broad as the fore-chest: face rather prominent, forming a very obtuse angle, adorned with a tawny mark on each side in front: eyes prominent: fore-chest not narrower in front, adorned with a slight tawny stripe: hind-scutcheon narrow above, slightly widened on each side: scutcheon of the middle-chest adorned with two slightly waved tawny stripes; hind border tawny, slightly excavated: hind-chest mostly tawny: abdomen tapering, bright tawny, much longer than the chest, mostly black above at the base, whence three black stripes composed of spots dwindle along the back and disappear at some distance from the tip: legs tawny, striped with black, clothed with short tawny hairs; claws black, tawny at the base: fore-thighs armed with three rather long teeth: feelers dark tawny: wings colourless, tawny at



the base; fore border ferruginous as far as the brand which is darker; veins black; flaps colourless. Length of the body 5 lines; of the wings 14 lines.

*a.* Adelaide. Presented by the Entomological Club.

#### 140. CICADA DOLENS, Mas et Fem.

*Nervus transversus* 1us rectus, subobliquus, angulum rectum fingens, 2o plus duplò ejus longitudine divisus; 2us subcurvus, ferè erectus, angulum obtusum fingens, 1o longior; 3us subcurvus, obliquus, angulum acutum fingens; 4us subcurvus, angulum acutum fingens, 3o longior et obliquior.

Second marginal arcelet a little longer than the first: first cross-vein straight, very slightly slanting, forming a right angle, parted from the second by more than twice its length; second slightly curved, nearly upright, forming an obtuse angle, longer than the first; third very slightly curved, slanting, forming an acute angle; fourth very slightly curved, forming an acute angle, longer and more slanting than the third; fifth slightly curved, upright, forming a nearly right angle.

*Male*.—Body black, clothed with white hairs: head clothed with golden hairs, and with longer black hairs, adorned with a tawny spot on each side at the base of the feelers; face slightly convex: mouth black, tawny at the base, as long as the middle hips: eyes rather prominent; feelers black: fore-chest not narrower in front; hind-scutcheon red along the hind border, narrow above, slightly widened and angular on each side; hind border of the middle-chest red, slightly excavated: abdomen tapering from the base to the tip, much longer than the chest; hind borders of the segments yellow towards the base, red towards the tip; a row of dull yellowish marks on each side beneath: drums small; opercula none: legs black; knees and shanks mostly tawny: wings colourless, tawny at the base; fore border tawny, black beyond the brand; veins tawny, striped with black at the base, black towards the tips; vein along the hind border thick, black: cross-vein beneath the brand pale tawny, yellow where it joins the brand; tips of the flaps clouded with brown.

Length of the body 7 lines; of the wings 17½ lines.

*a, b.* New Holland. Presented by Captain Grey.

## 141. CICAADA QUADRICINCTA, Mas.

*Nereus transversus* 1us subcurvus, obliquus, angulum obtusum fingens, 2o plus duplò ejus longitudine divisus; 2us subcurvus, angulum valdè obtusum fingens, 1o obliquior et paultò longior; 3us subundatus, obliquus, angulum rix acutum fingens; 4us subundatus, obliquus, angulum subacutum fingens, 3o paultò longior.

Second marginal areolet two-thirds of the length of the first: first cross-vein very slightly curved, slightly slanting, forming a slightly obtuse angle, parted from the second by much more than thrice its length; second slightly curved, slightly slanting, forming an obtuse angle, a little longer than the first; third very slightly waved, slanting, forming an acute angle; fourth almost straight, slightly slanting, forming a right angle, shorter than the third; fifth slightly curved, nearly upright, forming a slightly obtuse angle. Body black: head nearly as broad as the fore-chest, adorned with a tawny spot on each side of the face which has a tawny dot on its hind border, and is slightly convex and not at all prominent: mouth black, reaching the middle-hips: feelers black; eyes hardly prominent: fore-chest much broader than long; scutcheon adorned with two tawny spots in front and with one near each side which is pale tawny: hind-scutcheon narrow above, broader and rounded near the base of each fore-wing, straight on each side, ferruginous along the hind border: scutcheon of the middle-chest adorned with two oblique ferruginous stripes on each side; hind border slightly excavated: abdomen pitchy, obconical, not longer than the chest; hind borders of the segments adorned with ferruginous and green bands; a tawny stripe on each side beneath: opercula none; tymbals dingy white with black bands; drums rather large, almost white, more than one-third of the length of the abdomen, parted by a narrow space: legs tawny; thighs and shanks striped with black: feet and fore-shanks black: wings colourless; fore border ferruginous for near two-thirds of its length, and thence black for a short space; veins ferruginous, black towards the tips; fore-flaps whitish; hind-flaps colourless, white with blackish disks for a space along the hind border from the base. Length of the body 7 lines; of the wings 18 lines.

a. New Holland. Presented by Capt. Grey.

142. *CICADA RUFIFASCIA*, Mas.

*Nervus transversus* 1us subcurvus, erectus, angulum sobobtusum fingens, 2o plus triplò ejus longitudine divisis; 2us subcurvus, subobliquus, angulum obtusum fingens, 1o fere duplò longior; 3us subcurvus, obliquus, angulum acutum fingens; 4us rix curvus, obliquus, angulum acutum fingens, 3o multò brevior.

• Second marginal areolet longer than the first: first cross-vein slightly curved, upright, forming a slightly obtuse angle, parted from the second by more than thrice its length; second slightly curved, slightly slanting, forming an obtuse angle, nearly twice the length of the first; third very slightly curved, slanting, forming an acute angle; fourth hardly curved, slanting, forming an acute angle, much shorter than the third; fifth slightly curved, slightly slanting, forming a right angle. Body black, slender: head as broad as the fore-chest; a tawny dot between the eyelets, and another on the face which is slightly convex and not at all prominent, and has a red stripe in front on each side: mouth black, reaching the hind-hips: eyes prominent: feelers black: fore-chest not narrower in front than behind, adorned with a short tawny stripe which corresponds with the two tawny marks on the head; hind-scutcheon narrow above, wider by the base of the fore-wing where it forms a very slight angle, has a reddish tinge and extends beyond the sides of the scutcheon: scutcheon of the middle-chest pale red on each side and on the hind border which is not excavated: abdomen obconical, narrower and a little longer than the chest; hind borders of the segments adorned with narrow bright red bands which are interrupted in the middle; last segment red, its disk mostly black; under side bright red: opercula none; tymbals small, reddish gray; drums tawny, black towards the base, very small, parted by a broad interval: legs black; knees tawny; fore-thighs streaked with red, armed with three long black teeth; hind-shanks pitchy with tawny tips; fore-feet and middle-feet pitchy at the base; hind-feet tawny with black tips: wings colourless; fore border pale red as far as the brand, dark tawny with a red streak from thence till near the tip; veins black, tawny at the base; fore membranes red; flaps pale red at the base and along the veins. Length of the body 7 lines; of the wings 19 lines.

a. ——— ?

143. *CICADA DIVERSA*, Mas.

*Nervus transversus* 1us subcurvus, ferè erectus, angulum subobtusum fingens, 2o ferè triplò ejus longitudine divisus; 2us subcurvus, valdè obliquus, angulum perobtusum fingens, 1o multò longior; 3us subcurvus, obliquus, angulum rectum fingens; 4us ferè rectus, obliquus, angulum vic acutum fingens, 3i longitudine.

Second marginal areolet a little longer than the first: first cross-vein slightly curved, nearly upright, forming a very slightly obtuse angle, parted from the second by nearly thrice its length: second very slightly curved, very slanting, forming an extremely obtuse angle, very much longer than the first; third very slightly curved, slanting, forming a right angle: fourth nearly straight, slanting, forming a hardly acute angle, as long as the third; fifth slightly curved, upright, forming a slightly acute angle. Body black above, tawny beneath: head small, much narrower than the fore-chest; crown adorned with three tawny spots on the hind border, and at the base of each feeler with a large tawny spot which nearly incloses a black dot; face very convex, not prominent, black in front, beneath tawny with a black stripe: mouth pale tawny with a black tip, reaching the hind hips: eyes not prominent: feelers black: fore-chest narrower before than behind: scutcheon adorned with a tawny stripe which joins the middle spot on the hind border, and with two slightly oblique tawny streaks on each side: hind-scutcheon very narrow above, much widened on each side; its hind border tawny: scutcheon of the middle-chest adorned with two indistinct tawny streaks, by which it is imperfectly divided into the usual obconical stripes; sides, cross-ridge and hind border tawny, the latter slightly excavated: abdomen obconical, a little broader and much longer than the chest; hind borders of the segments and the whole surface on one-third of the breadth of each side tawny: opercula none; tymbals grayish-tawny; drums pale tawny, rather small, pitchy at the base, meeting in the middle: legs tawny; hips and thighs adorned with pitchy streaks; tips of the shanks and of the feet pitchy; claws black; fore-thighs armed with two long black teeth whose tips are ferruginous: wings colourless; fore border tawny; veins black, ferruginous towards the base; fore-flaps yellow; hind-flaps yellow at the base and along the veins, and for a short space along the hind border; an indistinct cross-vein in the first discoidal areolet of the left hind-wing. Length of the body 7 lines; of the wings 14 lines.

a. ———?

## 144. CICALA TELXIOPE, Fem.

*Nervus transversus* 1us *rectus, subobliquus, angulum obtusum* *figens, 2o plus triplò ejus longitudine divisus; 2us ferè* *rectus, obliquus, angulum valdè obtusum figens, 1o paulò* *longior; 3us subcurvus, erectus, angulum ferè rectum figens;* *4us subundatus, subobliquus, angulum vix acutum figens,* *3o multò longior.*

Second marginal areolet nearly three-fourths of the length of the first: first cross-vein straight, slightly slanting, forming an obtuse angle, parted from the second by much more than thrice its length; second almost straight, slanting, forming a very obtuse angle, a little longer than the first; third very slightly curved, upright, forming a nearly right angle; fourth very slightly waved, slightly slanting, forming a hardly acute angle, much longer than the third; fifth slightly curved, slightly slanting, forming a hardly obtuse angle. Body pale red: head as broad as the fore-chest; crown adorned with a black band which crosses the region of the eyelets, and has a branch on each side towards the hind border; face very convex, rather prominent, adorned in front with two black stripes: mouth tawny with a black tip, reaching the middle-hips: eyes rather prominent: feelers tawny, pitchy at the base: fore-chest not narrower in front than behind; hind-scutcheon narrow above, broader on each side where it is slightly excavated and armed with a blunt tooth: scutcheon of the middle-chest with a black dot on each side near the tip, its hind border hardly excavated: abdomen obconical, much longer than the chest: oviduct yellow: legs pale tawny; thighs streaked with black; tips of the claws black; fore-thighs armed with three tawny teeth, two large and one small: wings colourless; fore border and veins ferruginous; stripe on the fore border narrow beyond the brand. Length of the body 8 lines; of the wings 18 lines.

*n.* New Holland. Presented by the Haslar Hospital.

## 145. CICALA DUPLEX, Fem.

*Nervus transversus* 1us *subcurvus, obliquus, angulum obtusum* *figens, 2o plus triplò ejus longitudine divisus; 2us subcur-* *vus, subobliquus, angulum subobtusum figens, 1o paulò lon-* *gior; 3us subcurvus, obliquus, angulum subacutum figens;* *4us ferè rectus, obliquus, angulum subacutum figens, 3o* *multò brevior.*

Second marginal areolet nearly three-fourths of the length of the first: first cross-vein very slightly curved, slanting, forming an

obtuse angle, parted from the second by much more than thrice its length; second very slightly curved, slightly slanting, forming a slightly obtuse angle, very little longer than the first; third very slightly curved, slanting, forming a slightly acute angle; fourth nearly straight, slanting, forming a slightly acute angle, much shorter than the third; fifth slightly curved, nearly upright, forming a hardly acute angle. Body pale tawny, tinged with green: two pitchy marks in front, and two black dots towards the hind border of the scutcheon of the middle-chest, which is also adorned with two broad pale ferruginous slightly mottled stripes; the side pair a little oblique: oviduct ferruginous with a black tip: legs yellow: fore border and veins of the wings tawny. Length of the body 8 lines: of the wings 18 lines.

a. New Holland. Presented by the Haslar Hospital.

#### 146. CICADA ARCHE, Mas.

*Nerrus transversus* *1us rectus, subobliquus, angulum obtusum fingens, 2o quinquies ejus longitudine divisus; 2us subrectus, obliquus, angulum valdè obtusum fingens, 1o ferè duplò longior; 3us ferè rectus, subobliquus, angulum subacutum fingens; 4us rix curvus, subobliquus, angulum rix acutum fingens, 3i longitudine.*

Second marginal areolet nearly as long as the first: first cross-vein straight, slightly slanting, forming an obtuse angle, parted from the second by full five times its length; second nearly straight, slanting, forming a very obtuse angle, nearly twice the length of the first; third almost straight, slightly slanting, forming a slightly acute angle; fourth hardly curved, slightly slanting, forming a hardly acute angle, as long as the third: fifth very slightly curved, nearly upright, forming a slightly obtuse angle. Body tawny: head a little narrower than the fore-chest; face convex, not prominent: mouth pale tawny, reaching the hind-hips: feelers tawny: eyes not prominent, black with tawny net-work: hind-scutcheon of the middle-chest of moderate breadth above, a little broader on each side where it forms a slight angle and is excavated: scutcheon of the middle-chest adorned with three broad darker stripes which are indistinctly marked with paler net-work; hind border hardly excavated: abdomen tapering, much longer than the chest: drums small, not one-fourth of the length of the abdomen, parted by a broader interval: legs pale tawny; tips of the claws black; fore-thighs armed with two large tawny teeth whose tips are pitchy:

wings colourless; fore border and veins tawny. Length of the body 7 lines; of the wings 18 lines.

a. New Zealand. Presented by Dr. Hooker.

#### 147. CICADA CRUCIFERA, Mas.

*Nervus transversus* 1us subcurvus valdè obliquus, angulum perobtusum fingens, 2o plus duplò ejus longitudine divisus; 2us subcurvus, subobliquus, angulum obtusum fingens, 1o multò brevior; 3us vix undatus, subobliquus, angulum subacutum fingens; 4us vix undatus, 3o multò longior et obliquior et angulum acutiorem fingens.

Second marginal areolet very much longer than the first: first cross-vein very slightly curved, slanting, forming an extremely obtuse angle, parted from the second by much more than twice its length; second slightly curved, slightly slanting, forming an obtuse angle, much shorter than the first; third indistinctly waved, slightly slanting, forming a slightly acute angle; fourth indistinctly waved, much longer, more slanting and forming a more acute angle than the third; fifth slightly curved, nearly upright, forming a slightly acute angle. Body tawny, paler beneath: head narrower than the chest; region of the eyelets black, sending forth on each side to the eyes two black bands which, being united at the base, include tawny spaces between them; face prominent, very convex, adorned above with a semicircular black mark which is broader on each side than in front: mouth tawny with a black tip, reaching a little beyond the middle-hips: eyes rather prominent: feelers black: fore-chest hardly narrower in front than behind; sides, hind border and furrows of the scutcheon black, its disk adorned with two black spots near the fore border, behind these are four black spots, and the latter are succeeded by a forked black spot which joins the hind border; hind-scutcheon narrow, adorned with a pitchy mark on the fore border near the base of each fore-wing, where it is rounded and much widened, its sides are much excavated: scutcheon of the middle-chest adorned with three very large black marks; side pairs obconical, very broad at the base, extending near to the hind border, each enclosing a little tawny stripe; middle one semicircular, joining a black cross which adorns the cross-ridge; hind border not prominent: abdomen obconical, longer than the chest; disk above black with the exception of the hind borders of the segments, which are more or less tawny; horn tawny: opercula rather large, close, pale tawny, pitchy on the inner side; drums large, pale tawny, slightly overlapping, somewhat less than half the length of the ab-

domen: legs tawny; claws black, tawny at the base; fore-thighs armed with two rather large tawny teeth, one near the base, the other near the tip; spines of the hind-shanks pitchy: wings colourless, bright tawny at the base; primitive areolet and fore-membrane tawny; flaps bright tawny at the base and for a space along the hind border. Length of the body 11 lines; of the wings 30 lines.

a. Mexico. Presented by E. P. Coffin, Esq.

#### 148. CICADA ELANA, MRS.

*Nervus transversus* 1us ferè rectus, obliquus, angulum subacutum fingens, 2o plus duplò ejus longitudine divisus; 2us ferè rectus, erectus, angulum subobtusum fingens, 1o multò brevior; 3us subcurvus, ferè erectus, angulum vix obtusum fingens; 4us ferè rectus, subobliquus, angulum rectum fingens, 3o multò longior.

Second marginal areolet longer? than the first: first cross-vein nearly straight, slanting, forming a slightly acute angle, parted from the second by a little more than twice its length; second nearly straight, upright, forming a slightly obtuse angle, much shorter than the first; third very slightly curved, nearly upright, forming a hardly obtuse angle; fourth almost straight, slightly slanting, forming a right angle, much longer than the third; fifth slightly curved, upright, forming a slightly acute angle. In the right fore-wing of the insect described the first marginal areolet is closed at some distance from the tip of the wing. Body black, slender, tawny beneath: head a little narrower than the fore-chest, pale tawny in front; face tawny, very convex, slightly prominent; furrows in front brown: mouth tawny with a black tip, reaching the middle-hips: feelers black: eyes prominent: fore-chest much narrower in front than behind; scutcheon adorned with four tawny spots, two on the fore border and two on the hind border; hind-scutcheon very narrow, adorned with a black triangular middle spot, very much widened and slightly angular at the base of each fore-wing, hardly excavated on each side: scutcheon of the middle-chest adorned with two slightly oblique tawny stripes which widen from the fore border to the cross-ridge, which is also tawny; sides and hind border tawny, the latter hardly excavated: abdomen obconical, very much longer than the chest; hind borders of the segments tawny; horn pitchy: drums tawny, extremely small, parted by a very narrow interval: legs tawny; thighs and shanks adorned with pitchy streaks; fore-thighs armed with three long pitchy teeth: wings colourless; fore border pale tawny, darker beyond the band; veins tawny, black



towards the tips. Length of the body 8 lines; of the wings 18 lines.

a. South Africa. Presented by Dr. A. Smith.

#### 149. CICADEA XANTES, Mas.

*Nervus transversus 1us subcurvus, obliquus, angulum obtusum fingens, 2o plus duplò ejus longitudine divisus; 2us subcurvus, angulum valdè obtusum fingens, 1o obliquior et paullo longior; 3us subundatus, obliquus, angulum vix acutum fingens; 4us subundatus, obliquus, angulum subacutum fingens; 3o paullo longior.*

Second marginal areolet a little longer than the first: first cross-vein very slightly curved, slanting, forming an obtuse angle, parted from the second by a little more than twice its length; second very slightly curved, forming a very obtuse angle, more slanting and a little longer than the first; third slightly waved, slanting, forming a hardly acute angle; fourth very slightly waved, slanting, forming a slightly acute angle, a little longer than the third; fifth curved, upright, forming a slightly acute angle. Body tawny: head small, narrower than the fore-chest; crown mostly occupied by two very large black spots; face small, very convex, slightly prominent, red above, adorned with a pitchy stripe in front: mouth tawny with a black tip, reaching the middle-hips: eyes not prominent: feelers tawny, pitchy at the base and at the tips: fore-chest a little narrower in front than behind; scutcheon adorned with a yellow stripe, on each side of which there is a short slightly curved pitchy stripe; a small pitchy spot on the hind border; hind-scutcheon very narrow above, rounded and much widened above the base of each fore-wing, very slightly convex and not excavated on each side: scutcheon of the middle-chest adorned with four black obconical stripes, the middle pair rather less than half the length of the outer pair, and so close together that they seem almost united; behind them are two pitchy spots which join the cross-ridge, the latter is ferruginous and small; hind border not excavated: abdomen obconical, ferruginous, hardly longer than the chest, adorned with a pitchy stripe which tapers from the base to a little beyond the middle and then disappears: opercula pale tawny, very small, not half covering the tymbals which are ferruginous; drums bright tawny, rather narrow, of moderate size, about one-third of the length of the abdomen: legs tawny; thighs adorned with ferruginous streaks; tips of the claws black; fore-shanks and fore-feet ferruginous; fore-thighs armed with two rather long ferruginous teeth: wings colourless:

veins yellow; on the fore border a black vein is enclosed between two yellow veins and extends to the pale yellow brand; flaps with a tawny tinge at the base and along part of the middle vein. Length of the body 8 lines; of the wings 23 lines.

*a.* North India. From Mr. Warwick's collection.

#### 150. CICADA CADISIA, Mas.

*Nervus transversus* *lus ferè rectus, subobliquus, angulum obtusum fingens*, 20 *quingies ejus longitudine divisus*; 2us *ferè rectus, subobliquus, angulum obtusum fingens*, 10 *pauclò longior*; 3us *rectus, obliquus, angulum rectum fingens*; 4us *ferè rectus, angulum subacutum fingens*, 30 *obliquior et multò longior*.

Second marginal areolet full three-fourths of the length of the first: first cross-vein almost straight, slightly slanting, forming an obtuse angle, parted from the second by full five times its length; second almost straight, slightly slanting, forming an obtuse angle, a little longer than the first; third straight, slanting, forming a right angle; fourth nearly straight, forming a slightly acute angle, more slanting and much longer than the third; fifth curved, upright, forming a hardly acute angle. Body black, slender, tawny beneath: head a little narrower than the fore-chest; face convex, not prominent, adorned with a tawny spot above and with a tawny stripe on each side in front: mouth ferruginous with a black tip, reaching the hind-hips: eyes prominent: feelers black: fore-chest a little narrower in front than behind; scutcheon adorned in front with two pale tawny spots, with a dark red spot on each side, and with two tawny spots near the hind border; hind-scutcheon tawny, very narrow, black along the fore border, much widened and forming an obtuse angle at the base of each fore-wing, its sides not excavated: scutcheon of the middle-chest adorned with two pale red, nearly parallel stripes; cross-ridge tawny; hind border hardly excavated: abdomen obconical, much longer than the chest; hind borders of the segments tawny: drums pale tawny, small, parted by a narrow interval: legs pale red; feet ferruginous; claws black, ferruginous towards the base; thighs streaked with brown; knees pitchy; fore-feet black; fore-thighs armed with three long ferruginous teeth which are black at the base: wings colourless; fore border tawny; veins tawny, black towards the tips. Length of the body  $7\frac{1}{2}$  lines; of the wings  $16\frac{1}{2}$  lines.

*a, b.* South Africa. Presented by Dr. A. Smith.

## 151. CICADA PUER, Mas.

*Nervus transversus 1us rectus, erectus, angulum subobtusum fingens, 2o paullo plus duplo ejus longitudine divisus; 2us ferè rectus, subobliquus, angulum obtusum fingens, 1o paullo longior; 3us subcurvus, obliquus, angulum obtusum fingens; 4us subcurvus, subobliquus, angulum obtusum fingens, 3o paullo brevior.*

Second marginal areolet as long as the first: first cross-vein straight, upright, forming a slightly obtuse angle, parted from the second by a little more than twice its length; second almost straight, slightly slanting, forming an obtuse angle, a little longer than the first; third very slightly curved, slanting, forming an obtuse angle; fourth very slightly curved, slightly slanting, forming an obtuse angle, a little shorter than the third; fifth very slightly curved, nearly upright, forming a hardly acute angle. Has the shape of *C. incipiens* and of *C. inceptus*. Body tawny: head a little broader than the fore-chest; disk black; a black mark on each side beneath; face convex, adorned in front with black bands which are blended together in the middle: mouth tawny with a black tip, reaching the middle-hips: a black spot above near the base: feelers black, tawny towards the tips: eyes prominent: fore-chest not narrower in front; sutures of the scutcheon black; hind-scutcheon narrow above, slightly widened and rounded on each side: disk of the scutcheon of the middle-chest black, adorned with four tawny stripes which communicate with the hind border; the latter is slightly excavated: abdomen much longer than the chest, black above at the base whence a row of black spots proceeds nearly to the tip: drums pale tawny: legs pale brown, clothed with pale yellow hairs; hips and knees yellow; a yellow ring near the base of each shank; feet black towards the tips; claws tawny with black tips; thighs adorned with yellow and pitchy stripes; fore-thighs armed with three rather long black teeth: wings colourless, tinged with brown along the veins near the tip of the fore border, tawny at the base and along the fore border; veins pitchy, tawny at the base; flaps partly clouded with brown. Length of the body 5 lines; of the wings 13 lines.

*a.* Adelaide. Presented by the Entomological Club.

## 152 CICADA INFANS, Fem.

*Nervus transversus* 1us rectus, erectus, angulum subobtusum fingens, 2o plus triplò ejus longitudine divisus; 2us subcurvus, ferè erectus, angulum subobtusum fingens, 1o paullò longior; 3us ferè rectus, subobliquus, angulum subacutum fingens; 4us ferè rectus, subobliquus, angulum ferè rectum fingens, 3o paullò longior.

Second marginal areolet as long as the first: first cross-vein straight, upright, forming a slightly obtuse angle, parted from the second by much more than three times its length; second slightly curved, almost upright, forming a slightly obtuse angle, a little longer than the first; third almost straight, slightly slanting, forming a slightly acute angle; fourth almost straight, very slightly slanting, forming a nearly right angle, a little longer than the third; fifth curved, upright, forming a hardly acute angle. Body black above, tawny beneath, clothed with pale yellow hairs: head as broad as the fore-chest; crown adorned with a tawny middle stripe, and on each side with some tawny marks; face convex, rather prominent, adorned in front with black bands which blend together in the middle; mouth tawny with a black tip, as long as the middle-chest: feelers black: eyes rather prominent: fore-chest not narrower in front; scutcheon adorned with a tawny border and a tawny middle stripe; hind-scutcheon narrow above, slightly widened and rounded on each side: scutcheon of the middle-chest adorned with a dark tawny spot on each side and with two tawny stripes which widen towards their tips where they communicate with the tawny hind border; the latter is hardly excavated: abdomen much longer than the chest; hind borders of the segments adorned with tawny bands which widen towards the tip where the sides are wholly tawny: legs tawny, clothed with pale yellow hairs; knees and stripes of the thighs black; claws tawny; fore-shanks and fore-feet mostly pitchy; fore-thighs armed with three rather long black teeth: wings colourless, tawny at the base and along the fore border; veins tawny, darker towards the tips, marked with black at the base. Length of the body 5 lines; of the wings 13 lines.

a. Adelaide. Presented by the Entomological Club.

153. *CICADA TRICOLOR*, Mas.

*Nervus transversus* 1us subcurvus, obliquus, angulum subacutum fingens, 2o duplò ejus longitudine divisus; 2us subcurvus, ferè erectus, angulum obtusum fingens, 1o paullò brevior; 3us subcurvus, obliquus, angulum subacutum fingens; 4us ferè rectus, angulum acutum fingens, 3o obliquior et multò longior.

Second marginal areolet a little longer than the first: first cross-vein very slightly curved, slanting, forming a slightly acute angle, parted from the second by twice its length; second very slightly curved, nearly upright, forming an obtuse angle, very little shorter than the first; third very slightly curved, slanting, forming a slightly acute angle; fourth nearly straight, forming an acute angle, more slanting and much longer than the third; fifth very slightly curved, slightly slanting, forming a slightly acute angle. In the insect described the first marginal areolet is interrupted by one additional cross-vein in the left wing, and by two in the right. Body ferruginous: head hardly narrower than the fore-chest; crown mostly black; face very slightly convex, hardly prominent, its disk black: eyes not prominent: mouth tawny with a black tip: feelers black: fore-chest linear, adorned with six broad black stripes; middle pair linear; the other four oblique: sides straight; a tooth at the base of each fore-wing; hind-scutcheon narrow: disk of the scutcheon of the middle-chest mostly black, with a broad oblique ferruginous stripe on each side; excavation on the hind border: abdomen obconical, hardly longer than the chest; fore borders of the segments black; hind borders bright pale green: opercula small; tymbals pitchy; drums small: legs ferruginous; feet pitchy; claws black; fore-thighs armed with three long black teeth: wings and flaps colourless; veins and fore borders ferruginous; an additional cross-vein dividing the first marginal areolet. Length of the body 5 lines; of the wings 13 lines.

a. Venezuela. From Mr. Stevens's collection.

154. *CICADA NANA*, Mas.

*Nervus transversus* 1us rectus, erectus, angulum obtusum fingens, 2o triplò ejus longitudine divisus; 2us rectus, obliquus, angulum valdè obtusum fingens, 1o paullò longior; 3us rectus, subobliquus, angulum rectum fingens; 4us ferè rectus, angulum acutum fingens, 3o multò obliquior et longior.

First cross-vein straight, upright, forming an obtuse angle, parted from the second by thrice its length; second straight, slant-

ing, forming a very obtuse angle, a little longer than the first; third straight, slightly slanting, forming a right angle; fourth almost straight, forming an acute angle, much more slanting and very much longer than the third; fifth slightly curved, nearly upright, forming an almost right angle. Body tawny: head hardly narrower than the fore-chest; crown ferruginous, pitchy on each side; face convex, not prominent, adorned in front with two pitchy stripes: mouth dark tawny with a black tip, reaching the middle-hips: feelers tawny, very stout: eyes prominent: fore-chest ferruginous, very little narrower in front than behind; its sides slightly convex; hind-scutcheon very narrow; a very large triangular black mark on each side of the scutcheon whose hind border is hardly excavated: abdomen obconical, tapering quickly along the whole length, much longer than the chest: opercula small; drums of moderate size, rather less than one-third of the length of the abdomen: legs tawny; claws black; fore-thighs armed with three tawny teeth: wings and flaps colourless; veins tawny, black along the hind borders of the fore-wings. Length of the body 6 lines; of the wings 14 lines.

*a.* China. Presented by G. T. Lay, Esq.

### 155. *CICADA TRISTIS*? Mas et Fem.

*Cicada tristis*? *Germ. Silb. Rev. Ent.* ii. 60, 11.

*Nervus transversus* 1us *ferè rectus, obliquus, angulum valdè obtusum ficiens*, 2o *plus duplò ejus longitudine divisus*; 2us *curvus, obliquus, angulum valdè obtusum ficiens*, 1o *longior*; 3us *ferè rectus, obliquus, angulum acutum ficiens*; 4us *subcurvus, subobliquus, angulum rectum ficiens*, 3o *pauclò longior*.

Second marginal areolet much longer than the first: first cross-vein nearly straight, slanting, forming a very obtuse angle, parted from the second by much more than twice its length; second curved, slanting, forming a very obtuse angle, longer than the first; third nearly straight, slanting, forming an acute angle; fourth very slightly curved, slightly slanting, forming a right angle, a little longer than the third; fifth nearly straight or slightly curved, very slightly slanting, forming a hardly acute angle. In an insect of this species the third discoidal areolet of the right wing is divided by an additional long waved nearly diagonal cross-vein. Length of the body  $7\frac{1}{2}$  lines; of the wings 20 lines.

*a, b.* ———?

156. *CICADA CINCTA*, Mas.

*Nervus transversus* 1us subcurvus, erectus, angulum subobtusum fingens; 2o plus quadruplò ejus longitudine divisus; 2us subcurvus, ferè erectus, angulum obtusum fingens, 1o longior; 3us subcurvus, obliquus, angulum acutum fingens; 4us ferè rectus, angulum acutum fingens, 3o paulò longior et obliquior.

Second marginal areolet a little shorter than the first: first cross-vein very slightly curved, upright, forming a slightly obtuse angle, parted from the second by more than four times its length; second very slightly curved, nearly upright, forming an obtuse angle, longer than the first; third slightly curved, slanting, forming an acute angle; fourth almost straight, forming an acute angle, a little longer and more slanting than the third; fifth very slightly curved, almost upright, forming a right angle. Body tawny: head a little narrower than the fore-chest; crown black with the exception of a tawny stripe extending from the eyelets to the hind border; face very convex, rather prominent, black above with a tawny stripe in the middle: mouth tawny with a black tip, reaching the middle-hips: eyes prominent: feelers black, stout: fore-chest somewhat narrower in front than behind, rounded at the base of each fore-wing, nearly linear from thence to the fore border; scutcheon adorned with a yellow, middle stripe and with two black stripes on each side; hind-scutcheon narrow in the middle, widened on each side: scutcheon of the middle-chest adorned with four obconical black stripes; the middle pair about half the length of the outer pair, succeeded by two black dots; a slight oblique tawny stripe on each side; excavation of the hind border extremely slight: abdomen obconical, a little longer and much narrower than the chest, black for one-third of the length from the base; short black bands on the fore borders of some of the following segments; under side black at the base; disks of some of the segments pitchy: opercula none; tymbals white; drums pale tawny, small, parted by some space: legs tawny; thighs striped with darker colour; tips of the claws black; fore-thighs armed with three tawny teeth: wings colourless; veins tawny, black at the tips and along the hind borders of the fore-wings; hind-wings and flaps red at the base. Length of the body 7 lines; of the wings 18 lines.

a. New Zealand. Presented by Dr. Sinclair.

157. *CICADA ANNULIVENA*, Mas.

*Nervus transversus* 1us subundatus, obliquus, angulum valdè obtusum fingens, 2o plus triplò ejus longitudine divisus; 2us subrectus, valdè obliquus angulum perobtusum fingens, 1o paullò brevior; 3us subcurvus, obliquus, angulum acutum fingens; 4us ferè rectus, angulum acutum fingens, 1o paullò brevior et obliquior.

Second marginal areolet longer than the first: first cross-vein very slightly waved, slanting, forming a very obtuse angle, parted from the second by much more than thrice its length; second nearly straight, very slanting, forming an extremely obtuse angle, a little shorter than the first; third very slightly curved, slanting, forming an acute angle; fourth nearly straight, forming an acute angle, a little shorter and more slanting than the third; fifth very slightly curved, nearly upright, forming a hardly acute angle. Body black: head rather small, narrower than the fore-chest, adorned with a pale yellow spot on each side of the face, and with two other yellow spots nearer the eyelets; face slightly convex, not at all prominent: mouth black, tawny towards the base: eyes prominent: feelers black, stout: fore-chest narrower in front than behind, adorned with five tawny stripes; the middle one linear, the inner pair nearly straight, the outer pair very oblique; hind-scutcheon narrow in the middle, widened on each side, rounded near the base of each fore-wing: scutcheon of the middle-chest adorned on the disk with the indication of a tawny, double V-shaped mark, and on each side with an oblique tawny stripe; cross-ridge tawny; excavation on the hind border very slight: abdomen slightly obconical, very much longer than the chest; hind borders of the segments and under side tawny: opercula none; tymbals white; drums small, pale tawny, parted by a narrow interval: legs black: thighs and shanks adorned with tawny stripes; fore-thighs armed with two stout teeth: wings colourless; veins tawny, marked with black at the base, darker at the tips; veins and fore border of the fore-wings adorned with numerous brown bands, indications of which may be observed on the veins of the hind-wings; cross-veins of the fore-wings clouded with brown; a row of brown dots at the tips of the longitudinal veins of the marginal areolets; flaps of the hind-wings tinged with pale brown at the base. Length of the body  $7\frac{1}{2}$  lines; of the wings 18 lines.

a. South Africa. Presented by Dr. A. Smith.



158. *CICADA STRIATA*, MSS. Fem.

*Nervus transversus* 1us subcurvus, erectus, angulum subobtusum fingens, 2o plus ejus longitudine divisus; 2us subcurvus, ferè erectus, angulum subobtusum fingens, 1o paullo longior; 3us subundatus, obliquus, angulum acutum fingens; 4us ferè rectus, obliquus, angulum acutum fingens, 3o brevior.

Second marginal areolet longer than the first: first cross-vein slightly curved, upright, forming a very slightly obtuse angle, parted from the second by much less than twice its length; second very slightly curved, almost upright, forming a slightly obtuse angle, a little longer than the first; third slightly waved, slanting, forming an acute angle; fourth nearly straight, slanting, forming an acute angle, shorter than the third; fifth indistinctly curved, nearly upright, forming an almost right angle. In the left wing of the insect described the third and fourth marginal areolets are united, the vein between them being wanting. Body tawny: head a little narrower than the fore-chest, adorned above with a broad, slightly interrupted black band; face convex, with a row of black bands on each side: eyes not prominent: mouth tawny, pitchy towards the tip, reaching the hind-hips: fore-chest narrower in front, partly black above, adorned in the middle with a short broad yellow stripe; hind-scutcheon narrow above, much broader and slightly angular on each side: middle-chest mostly occupied by four very broad black stripes, the side pair much longer than the middle pair and adorned with tawny streaks; hind border hardly excavated: abdomen obconical, very little longer than the chest, mostly pitchy above: legs tawny; fore-thighs armed with three rather long teeth: wings colourless; veins tawny, black towards the tips; first and second cross-veins clouded with brown; fore-flaps tawny; tips of hind-flaps brown. Length of the body 8 lines; of the wings 22 lines.

159. *CICADA TRUNCATELLA*, MRS.

*Nervus transversus* 1us rectus, subobliquus, angulum subobtusum fingens, 2o plus quadruplo ejus longitudine divisus; 2us subcurvus, erectus, angulum subobtusum fingens, 1o paullo longior; 3us ferè rectus, subobliquus, angulum subacutum fingens; 4us ferè rectus, subobliquus, angulum ferè rectum fingens, 3o paullo longior.

Second marginal areolet full three-fourths of the length of the first: first cross-vein straight, slightly slanting, forming a very

slightly obtuse angle, parted from the second by more than four times its length; second very slightly curved, upright, forming a slightly obtuse angle, a very little longer than the first; third nearly straight, slightly slanting, forming a very slightly acute angle; fourth almost straight, slightly slanting, forming a nearly right angle, a little longer than the third; fifth nearly straight, almost upright, forming a very slightly obtuse angle. The first discoidal areolet is very short and the third is very large. Body pale tawny: head as broad as the fore-chest; two black stripes united in front on the crown across the eyelets; a black band in front; face very slightly convex, not at all prominent, adorned with a black stripe in front: mouth tawny with a black tip, reaching the hind-lips: feelers tawny at the base: eyes rather prominent: fore-chest rather short, not narrower in front than behind; scutcheon ferruginous above with the exception of a pale tawny middle stripe; hind-scutcheon tawny, very narrow, rather broader and forming an obtuse angle at the base of each fore-wing, nearly straight on each side: scutcheon of the middle-chest adorned with four ferruginous stripes; middle pair shorter and narrower than the outer pair; hind border not excavated: abdomen obconical, pitchy, a little shorter than the chest, tawny towards the base: opercula none; tymbals pale tawny; drums pale tawny, of moderate size, not apart, less than half the length of the abdomen: legs pale tawny; tips of the claws black; fore-thighs armed with three tawny teeth, two of moderate size, the third very small: wings with a very indistinct tawny tinge; tips of the forewings tawny; fore border tawny as far as the brand, very convex near the base; veins tawny, black towards the tips; fore-flaps dingy buff; hind-flaps colourless, pale brown for a space along the hind border from the base. Length of the body  $6\frac{1}{2}$  lines; of the wings 19 lines.

a. ——— ?

#### 160. CITADA ANGEA, Mas.

*Nervus transversus* 1us ferè rectus, erectus, angulum subobtusum fingens, 2o duplò ejus longitudine divisus; 2us rectus, obliquus, angulum obtusum fingens, 1i longitudine; 3us subundatus, obliquus, angulum acutum fingens; 4us subundatus, obliquus, angulum subacutum fingens, 3o multò longior.

Second marginal areolet as long as the first: first cross-vein almost straight, upright, forming a slightly obtuse angle, parted from the second by twice its length: second straight, slanting, forming an obtuse angle, as long as the first; third slightly waved,

slanting, forming an acute angle; fourth very slightly waved, slanting, forming a slightly acute angle, much shorter than the third; fifth very slightly curved, slightly slanting, forming a very slightly acute angle. The specimen described may be immature. Body tawny, clothed with pale hairs: head nearly as broad as the fore-chest, adorned with a tawny spot between the eyelets and with a yellow spot on each side of the face; the latter ferruginous, slightly convex, not at all prominent: mouth tawny with a black tip, reaching the middle-hips: eyes not prominent: feelers tawny, pitchy at the base: fore-chest ferruginous, very little narrower in front than behind; scutcheon adorned with a slender tawny stripe, which tapers from the fore border to the hind border; two tawny spots on the hind border; hind-scutcheon pitchy, very narrow in the middle but much widened above the base of each fore-wing, slightly excavated on each side: scutcheon of the middle-chest adorned with four obconical pitchy stripes, the outer pair veined with tawny, the inner pair much shorter, yellow at the base, succeeded by a large pitchy spot which sends forth a fork on each side towards the cross-ridge: abdomen obconical, a little longer than the chest, ferruginous, with a pitchy stripe on the back: opercula extremely small; tymbals pale tawny; drums pale yellow, of moderate size, slightly overlapping: legs pale tawny; feet and fore-legs darker; claws pitchy towards the tips; fore-thighs armed with three tawny teeth with black tips: wings colourless; fore border and veins very pale tawny, darker towards the tips: fore-flaps pale tawny; hind-flaps pale tawny along part of the hind border. Length of the body 7 lines; of the wings  $19\frac{1}{2}$  lines.

*a.* North Bengal. From Miss Campbell's collection.

#### 161. CICADA COMPLEX, Mas.

*Nereus transversus* 1us rectus, ferè erectus, angulum subobtusum, fingens, 2o ferè duplò ejus longitudine divisus; 2us subcurvus, ferè erectus, angulum ferè rectum fingens, 1o longior; 3us vix curvus, obliquus, angulum acutum fingens; 4us rectus, perobliquus, angulum ferè rectum fingens, 3i longitudine.

Second marginal areolet much longer than the first: first cross-vein straight, nearly upright, forming a slightly obtuse angle, parted from the second by nearly twice its length; second very slightly curved, nearly upright, forming an almost right angle, longer than the first; third hardly curved, slanting, forming an acute angle; fourth straight, extremely slanting, almost level, forming a nearly right angle, as long as the third; fifth curved, upright, forming a very slightly acute angle. In some of the smaller *Cicadæ* the front

areolet is very long, which character may be used for sections and is most developed in this species, the fore borders of whose wings are very convex; the first and second marginal areolets are very short, and in the left wing of the insect described the latter is divided by a cross-vein. Body tawny, paler beneath: head a little narrower than the fore-chest, black above; a tawny spot on the region of the eyelets, and another on each side of the face which is convex but not prominent, and has a slender tawny stripe above and a broad black stripe in front: mouth tawny with a black tip, reaching the middle-hips: feelers black, stout: eyes rather prominent: fore-chest rather narrower before than behind; scutcheon adorned with two black stripes which are widened towards the borders, and with two short pitchy stripes which are more outward; furrows pitchy; hind-scutcheon narrow, rather narrower on each side where the fore border is black, extending very little beyond the scutcheon: disk of the scutcheon of the middle-chest black, adorned with two hardly oblique tawny stripes which widen towards the hind border, the latter is not excavated: abdomen obconical, longer but not narrower than the chest, adorned above with a black stripe which tapers from the base to the tip and is interrupted near the latter; a row of black spots on each side: opercula very small; tymbals white; drums pale yellow, of moderate size, less than one-fourth of the length of the body, parted by a narrow interval: legs yellow; tips of the feet and of the claws pitchy; fore-thighs adorned with three long tawny teeth; fore-shanks dark tawny: wings colourless; veins tawny, black towards the tips; fore border yellow, somewhat convex, widened near the brand; it is there slightly notched and very narrow, but again widens towards the tip; fore-membranes pale yellow; flaps colourless; the first areolet is very short, and in the specimen described is divided longitudinally into two areolets, the upper of which in the left wing is again divided across by a little vein. Length of the body 5 lines; of the wings 13 lines.

a. ——— ?

#### 162. CICADA ACRIDA, Fem.

*Nervus transversus* 1us ferè rectus, erectus, angulum subobtusum fngens, 2o plus triplò ejus longitudine divisus; 2us ferè rectus, erectus, angulum subobtusum fngens, 1 multò longior; 3us ferè rectus, obliquus, angulum acutum fngens; 4us circurvus, subobliquus, angulum ferè rectum fngens, 3o paullo longior.

Second marginal areolet about three-fourths of the length of the first: first cross-vein almost straight, upright, forming a slightly

obtuse angle, parted from the second by more than thrice its length ; second almost straight, upright, forming a slightly obtuse angle, much longer than the first ; third almost straight, slanting, forming an acute angle ; fourth hardly curved, forming a nearly right angle, less slanting and a little longer than the third ; fifth very slightly curved, nearly upright, forming a hardly obtuse angle. In the right wing of an insect of this species the third marginal areolet is divided by an additional cross-vein. Body green : head narrower than the fore-chest ; face convex : mouth tawny : eyes not prominent : feelers black, tawny at the base : hind border of the scutcheon of the middle-chest hardly excavated : abdomen obconical, much longer than the fore-chest : oviduct ferruginous : legs green ; feet and fore-shanks tawny ; shanks tinged with tawny ; claws tawny with black tips ; fore-thighs armed with four tawny teeth whose tips are black, three of moderate size, the second combined with two very little teeth, the fourth small : wings colourless ; wing-ribs and veins tawny. Length of the body 6 lines ; of the wings 18 lines.

a. Cape. From M. Dregé's collection.

### 163. CICAADA AETHLIUS, Mas.

*Nervus transversus* 1us ferè rectus, obliquus, angulum valdè obtusum fingens, 2o ferè duplò ejus longitudine divisus ; 2us rectus, subobliquus, angulum obtusum fingens, 1i dimidio rix longior ; 3us rectus, subobliquus, angulum rix obtusum fingens ; 4us subcurvus, subobliquus, angulum ferè rectum fingens, 3o multò brevior.

First cross-vein almost straight, slanting, forming a very obtuse angle, parted from the second by a little less than twice its length ; second straight, slightly slanting, forming an obtuse angle, not much more than half the length of the first ; third straight, slightly slanting, forming a hardly obtuse angle ; fourth very slightly curved, slightly slanting, forming a nearly right angle, much longer than the third ; fifth curved, slightly slanting, forming a nearly right angle. In the right wing of the insect described the second marginal areolet is divided by an additional longitudinal vein, and in the left wing the first marginal areolet is divided by an additional cross-vein. Body and legs tawny : wings colourless ; veins pale tawny. Length of the body 5 lines ; of the wings 12 lines.

a. Cape. From M. Dregé's collection.

## 164. CICADA FUSIFORMIS, Mas.

*Nervus transversus* 1us ferè rectus, subobliquus, angulum rectum fingens, 2o ferè duplò ejus longitudine dirisus; 2us rix curvus, erectus, angulum obtusum fingens, 1o multò brevior; 3us rix undatus, subobliquus, angulum rix acutum fingens; 4us rix undatus, obliquus, angulum acutum fingens, 3o paulò brevior.

Second marginal areolet much longer than the first: first cross-vein almost straight, slightly slanting, forming a right angle, parted from the second vein by a little less than twice its length: second hardly curved, upright, forming an obtuse angle, much shorter than the first; third hardly waved, slightly slanting, forming a hardly acute angle: fourth hardly waved, slanting, forming an acute angle, a little shorter than the third; fifth curved, slightly slanting, forming an acute angle. Body tawny, clothed with tawny hairs, slightly tinged with ferruginous on the back: head very small, little more than half the breadth of the fore-chest; crown black with the exception of a pale tawny spot at the base of each feeler; face very convex, rather prominent, adorned with a black band on each side in front: mouth tawny with a pitchy tip, reaching the middle-hips: eyes rather prominent: feelers pitchy, tawny at the base and at the tips: fore-chest much narrower before than behind: scutcheon adorned with a black middle stripe, and on each side with a large black spot; hind-scutcheon very much widened at the base of each fore-wing, slightly excavated on each side: scutcheon of the middle-chest adorned with four obconical black stripes, the inner pair about half the length of the outer pair, forming a semicircle; hind border hardly excavated: abdomen oval, longer and broader than the chest, black above at the base, adorned with a row of pitchy dots, tapering towards the tip: opercula none; tymbals tawny; drums pale tawny, very small, rather far apart: legs pale tawny; feet and fore-shanks darker tawny; tips of the claws pitchy; fore-thighs armed with two long teeth: wings colourless; fore border and veins tawny; a yellow band on the brand which is pitchy; fore-flaps pale tawny; hind-flaps pale tawny at the base and along part of the fore border. Length of the body 7 lines; of the wings 17 lines.

a. ——— ?

## 165. CICADA CALLIOPE, Mas.

*Nervus transversus* 1us rectus, subobliquus, angulum obtusum fingens, 2o quadruplò ejus longitudine divisus; 2us rectus, subobliquus, angulum obtusum fingens, 1o multò brevior; 3us vix curvus, obliquus, angulum vix acutum fingens; 4us subcurvus, angulum subacutum fingens, 3o obliquior et paulò brevior.

Second marginal areolet nearly as long as the first: first cross-vein straight, slightly slanting, forming an obtuse angle, parted from the second by full four times its length; second straight, slightly slanting, forming an obtuse angle, very much shorter than the first; third hardly curved, slanting, forming a hardly acute angle; fourth very slightly curved, forming a slightly acute angle, more slanting and a little shorter than the third; fifth curved, upright, forming a nearly right angle. Body pale ferruginous: head as broad as the fore-chest; face slightly convex, not at all prominent, adorned with a tawny stripe: crown pitchy: mouth ferruginous with a black tip, reaching the middle-hips: eyes not prominent: feelers tawny, pitchy towards the base: fore-chest not narrower before than behind; scutcheon adorned with two parallel pitchy stripes, its sides and the furrows also pitchy; hind-scutcheon rather narrow above, much broader and rounded at the base of each fore-wing, convex on the middle of each side: scutcheon of the middle-chest adorned with three broad black stripes; the side pair slightly obconical and oblique; hind border hardly excavated: abdomen obconical, very little longer than the chest, paler beneath, adorned with three rows of pitchy spots, which are much larger and more distinct on each side than in the middle; hind borders of the segments pale tawny; opercula none; tymbals small, grayish; drums tawny, small, parted by a broad interval: legs ferruginous; hips and thighs adorned with pitchy stripes; feet tawny with pitchy tips; tips of the claws black; fore-thighs armed with three long black teeth: wings colourless: fore border ferruginous; veins ferruginous, black towards the tips; fore membranes tawny; flaps tinged with brown at the tips, buff at the base and along the middle vein. Length of the body 6 lines: of the wings 17 lines.

a. Warm Springs, N. Carolina. Presented by E. Doubleday, Esq.

166. *CICADA NERVOSA*, Mas.

*Nervus transversus* 1us rectus, subobliquus, angulum subobtusum fignens, 2o triplo ejus longitudine divisus; 2us subcurvus, erectus, angulum obtusum fignens, 1o paullo longior; 3us subcurvus, obliquus, angulum rectum fignens; 4us ferè rectus, obliquus, angulum rectum fignens, 3o paullo brevior.

Second marginal areolet much longer than the first: first cross-vein straight, slightly slanting, forming a slightly obtuse angle, parted from the second by full thrice its length; second very slightly curved, upright, forming an obtuse angle, a little longer than the first; third very slightly curved, slanting, forming a right angle; fourth nearly straight, slanting, forming a right angle, a little shorter than the third; fifth very slightly curved, upright, forming a very slightly obtuse angle. Body black, partly clothed with white down: breast and under side of the head pale tawny: head nearly as broad as the fore-chest, adorned with a yellow interrupted middle stripe, and on each side above the base of the feelers with two connected greenish spots; face convex, not prominent, adorned above with a pale tawny stripe, and with a broader and paler stripe in front: mouth pitchy with a black tip, reaching the middle-hips: eyes not prominent: feelers black: scutcheon of the fore-chest adorned with a slender pale tawny middle stripe, and on each side with three irregular interrupted oblique ferruginous stripes; hind-scutcheon narrow, greenish yellow, broader, partly pitchy, forming a slightly obtuse angle and extending beyond the scutcheon at the base of each fore-wing: scutcheon of the middle-chest adorned with two tawny stripes which are widened in the middle and curved behind, where they are united on the tawny cross-ridge; sides and hind border mostly tawny, the latter slightly excavated: abdomen obconical, a little longer and narrower than the chest; hind borders of the segments green; a tawny stripe beneath on each side towards the base: horn of the tip conspicuous; opercula none; tymbals whitish; drums very small, pale tawny, parted by a moderate interval; legs yellow; thighs and shanks streaked with black; feet black with yellow bands; fore-thighs armed with three black teeth, whose hind parts are ferruginous, two very large, one of moderate size: wings colourless; fore border dark tawny; veins black, pale tawny towards the base; fore-flaps tawny; hind-flaps whitish at the base and along the veins.

Length of the body 7 lines; of the wings 17 lines.

*Var. β.* Stripes of the middle-chest interrupted: fore-feet and middle-feet black; fore border of the wings pitchy.

*a, b.* New Zealand. Presented by Dr. Sinclair.



167. *CICADA OBLIQUA*, Mas.

*Nervus transversus* 1us ferè rectus, perobliquus, angulum non fingens, 2o plus duplò ejus longitudine divisus; 2us ferè rectus, perobliquus, angulum non fingens, 1o paultò longior; 3us subundatus, subobliquus, angulum subacutum fingens; 4us subcurvus, obliquus, angulum acutum fingens, 3o paultò brevior.

Second marginal areolet much longer than the first: first cross-vein nearly straight, extremely slanting, not forming an angle, parted from the second by much more than twice its length; second nearly straight, extremely slanting, not forming an angle, a little longer than the first; third slightly waved, slightly slanting, forming a very slightly acute angle; fourth slightly curved, slanting, forming an acute angle, a little shorter than the third; fifth slightly curved, upright, forming a nearly right angle. Body black above, ferruginous and covered with white powder beneath: head narrower than the fore-chest, adorned with a ferruginous spot in front on each side of the face; the latter is slightly convex and not at all prominent; its sides and the fore border in front are ferruginous: mouth ferruginous, black at the base and at the tip, reaching the middle-hips: feelers black: eyes not prominent: fore-chest narrower in front than behind; scutcheon red along the fore border, adorned with seven red stripes, the middle one slender, the inmost pair curved, the next pair oblique, the outer pair very oblique; hind-scutcheon red, narrow in the middle, rounded, partly black and much widened above the base of each fore-wing, slightly excavated on each side: scutcheon of the middle-chest adorned with four slender slightly oblique red stripes; sides, cross-ridge, and hind border mostly red, the latter not excavated: abdomen obconical, longer than the chest; hind borders of the segments, horn and the tip red: drums small, pale red, rather far apart; legs red; thighs, shanks and fore-hips streaked with black; claws black, red at the base; fore-thighs armed with two long black teeth; fore-feet and middle-feet black, the latter red at the base; tips of hind-feet pitchy: wings colourless; fore border tawny as far as the brand, pitchy from thence towards the tip; veins tawny, black towards the tips; cross-veins from the first to the fourth and the adjoining parts of the longitudinal veins between the second cross-vein and the fore border clouded with dark brown; a brown spot on the tip of the lower vein of the sixth marginal areolet. Length of the body 9 lines; of the wings 22 lines.

a. South Africa. Presented by Dr. A. Smith.

168. *CICADA AURATA*, Mas et Fem.

*Nervus transversus* 1us subcurvus, obliquus, angulum valdè obtusum fingens, 2o plus duplò ejus longitudine divisus; 2us subcurvus obliquus, angulum valdè obtusum fingens, 1o longior; 3us subcurvus, subobliquus, angulum rix obtusum fingens; 4us subcurvus, obliquus, angulum ferè rectum fingens, 3o longior.

Second marginal areolet a little longer than the first: first cross-vein very slightly curved, oblique, forming a very obtuse angle, parted from the second by much more than twice its length; second slightly curved, oblique, forming a very obtuse angle, longer than the first; third very slightly curved, slightly oblique, forming a hardly obtuse angle; fourth very slightly curved, oblique, forming a nearly right angle, longer than the third; fifth very slightly curved, nearly upright, forming a nearly right angle.

*Male*.—Body black, thickly clothed with tawny hairs, pale tawny beneath: head a little narrower than the fore-chest, adorned with a tawny band in front; three tawny spots about the region of the eyelets; face tawny, very convex, its disk black; mouth pale tawny with a black tip, reaching the middle-hips: eyes very prominent: feelers black: scutcheon of the fore-chest adorned with tawny borders and with a short tawny stripe, behind which are two triangular tawny spots resting on the hind border; hind-scutcheon tawny, very narrow in the middle, much widened near the base of each fore-wing, armed with a tooth on each side: scutcheon of the middle-chest adorned with two tawny stripes whose middle parts are much widened; hind border tawny, very slightly excavated: abdomen velvety black, obconical, longer than the chest, adorned with patches of golden hairs; opercula none; tymbals tawny, rather large; drums pale tawny, small, wide apart; tip tawny, armed with a tawny horn: legs yellow; thighs striped with black; tips of the shanks and of the feet black; claws black, tawny at the base; fore-thighs armed with three stout black teeth; fore-shanks mostly black: wings quite colourless, pale buff and marked with buff at the base; fore border bright rose red, darker towards the tips, black on the brand; veins of the fore-wings tawny, black towards the tips; first and second cross-veins and the longitudinal vein between them clouded with black; veins of the hind-wings pale tawny with black tips; tips of the flaps clouded with brown. In the left wings of the two insects there is a little additional vein which divides the sixth marginal areolet between the third and fourth cross-veins.

*Fem.*—Abdomen a little longer and more pointed than that of the male.

Length of the body 7—8 lines; of the wings 18—20 lines.

*a—c.* From Dr. Hooker's collection.

#### 169. CICADA HOTTENTOTTA?

*Cicada Hottentotta?* *Oliv. Enc. Mèth.* v. 758, 58, pl. 113, f. 14.  
*Stoll, Cic.* 94, pl. 25, f. 137.

*Nervus transversus* 1us rectus, subobliquus, angulum obtusum fingens, 2o plus duplò ejus longitudine divisus; 2us subcurvus, obliquus, angulum valdè obtusum fingens, 1o longior; 3us rectus, obliquus, angulum rectum fingens; 4us ferè rectus, valdè obliquus, angulum acutum fingens, 3o multò longior.

Second marginal areolet about three-fourths of the length of the first: first cross-vein straight, very slightly slanting, forming an obtuse angle, parted from the second by more than twice its length; second slightly curved, slanting, forming a very obtuse angle, longer than the first; third straight, slanting, forming a right angle; fourth nearly straight, very slanting, forming an acute angle, much longer than the third; fifth curved, upright, forming a hardly acute angle. Body black above, tawny beneath: head rather short, hardly narrower than the fore-chest; a tawny dot behind the eyelets and another on the face which is slightly convex and has two tawny spots on each side, and two tawny stripes in front: mouth ferruginous with a black tip, reaching the middle-hips: eyes not prominent: a short slender tawny streak on the disk of the fore-chest which has two small tawny spots on each side, and is hardly narrower in front than behind; hind-scutcheon short, slightly streaked with tawny near each side where it is rounded on approaching the base of the fore-wings, and extends beyond the scutcheon whose sides are slightly convex: sides and hind border of the scutcheon of the middle-chest mostly tawny; excavation on the hind border almost obsolete: abdomen obconical, much longer than the chest; sutures of the segments tawny; along each side an irregular row of tawny spots which are largest at the tip; disk of the base black beneath: opercula none; tymbals whitish; drums yellow, very small, parted beneath by a broad interval: legs tawny; thighs streaked with brown; feet and tips of the shanks brown; a tawny band on each of the four hinder feet; claws tawny with pitchy tips; fore-thighs armed with three very large teeth: wings slightly tinged with tawny, clouded more or less with brown

which is disposed in four very large patches; one at the tip of each wing, but not extending beyond the veins; the third extending along the fore border on half the breadth of the wing from the base; the fourth at the base of each hind-wing is smaller, paler, or sometimes obsolete: veins tawny, darker towards the tips; fore-flaps pale buff; hind-flaps pale buff towards the base. Length of the body  $8\frac{1}{2}$  lines; of the wings 20 lines.

*Var. β.* A broad tawny stripe along each side of the abdomen from the second segment to the tip.

*a. Natal.* From Dr. Krauss' collection.

*b. ——— ?*

### 170. CICA DA AURORA, Mas.

*Nervus transversus* 1us perobliquus, subcurvus, angulum perobtusum fingens, 2o plus duplò ejus longitudine divisus; 2us fere rectus, perobliquus, angulum vicè fingens, 1i longitudine; 3us undatus, obliquus, angulum subacutum fingens; 4us subcurvus, obliquus, angulum subacutum fingens, 3i longitudine.

Second marginal areolet a little longer than the first: first cross-vein extremely slanting, very slightly curved, forming an extremely obtuse angle, parted from the second by much more than twice its length; second nearly straight, extremely slanting, forming a hardly perceptible angle, as long as the first; third waved, slanting, forming a slightly acute angle; fourth slightly curved, slanting, forming a slightly acute angle, as long as the third; fifth slightly curved, nearly upright, forming a slightly acute angle. Body black, rather short: head much narrower than the fore-chest, adorned with a large pale tawny spot on each side of the face which is slightly convex and not prominent: mouth black, tawny at the base, reaching the middle-hips: feelers black: eyes not prominent: fore-chest narrower in front than behind; scutcheon adorned with a pale tawny fore border, and on the disk with a pale tawny stripe; hind-scutcheon pale tawny, with an angular black mark in the middle of its fore border, narrow above, broader at the base of each fore-wing and much exceeding the breadth of the scutcheon: sides and hind border of the scutcheon of the middle-chest mostly tawny; excavation of the hind border almost obsolete; two irregularly triangular tawny spots on the disk: breast tawny; disks of the segments black: abdomen obconical, a little longer than the chest; tip tawny; hind borders of the segments adorned with reddish tawny bands, which are narrow and interrupted towards the base where they quite cease; under side pale tawny with a narrow black stripe: opercula none;

tymbals gray; drums pale tawny, rather small, wide apart: legs black; hips and thighs adorned with tawny stripes; knees and hind-shanks tawny; shanks red at the base; fore-thighs armed with two stout teeth; hind-feet tawny with black tips: fore-wings dark reddish tawny from the base to the cross-veins, nearly colourless from thence to the tips; cross-veins clouded with brown; a row of brown spots along the tips of the longitudinal veins of the marginal areolets; veins black, adorned as far as the cross-veins with numerous little tawny bands; hind-wings bright red as far as the cross-veins which are clouded with black, colourless from thence to the borders which are adorned with opaline lustre; veins black, adorned here and there with tawny bands; flaps bright red.

*Fem.*—Abdomen more obconical and a little shorter than that of the male; bands tawny, less interrupted: legs tawny; hips and thighs slightly striped with black; fore-shanks and middle-shanks very slightly striped with black; feet black: fore-wings colourless, brownish-tawny towards the base; cross-veins clouded with pale brown; a row of pale brown spots at the tips of the longitudinal veins of the marginal areolets; hind-wings red nearly as far as the cross-veins which are clouded with brown, colourless thence to the tips; flaps bright red.

Length of the body 11 lines; of the wings 27 lines.

*a, b.* South Africa. Presented by Dr. A. Smith.

#### 171. CICADA PRIMITIVA, Mas.

*Nervus transversus* 1us subcurvus, perobliquus, angulum perobtusum fingens, 2o triplò ejus longitudine divisus; 2us subcurvus, perobliquus, angulum non fingens, 1o paulò brevior; 3us subundatus, obliquus, angulum acutum fingens; 4us valdè curvus, ferè erectus, angulum rectum fingens, 3o paulò brevior.

Second marginal areolet a little longer than the first: first cross-vein slightly curved, extremely slanting, forming an extremely obtuse angle, parted from the second by full thrice its length; second very slightly curved, so extremely slanting that it does not form the usual angle, a little shorter than the first: third slightly waved, slanting, forming an acute angle; fourth much curved, nearly upright, forming a right angle, a little shorter than the third; fifth curved, nearly upright, forming a hardly acute angle. Body black, pale red beneath: head red, narrower than the fore-chest; a broad black band across the crown; three red spots along the hind border; face very slightly convex: mouth red with a black tip reaching the mid-

dle-hips : eyes prominent : feelers black : scutcheon of the fore-chest not narrower before than behind, adorned with a red border and with five red stripes on the disk, the middle one diamond-shaped, the inner pair interrupted, not so oblique as the outer pair which occupy the furrows ; hind-scutcheon red, narrow above, wider and extending much beyond the scutcheon at the base of each fore-wing, abruptly narrower on each side : scutcheon of the middle-chest adorned with four red oblique stripes, of these the outer pair are much shorter than the inner pair which are nearer the fore border : sides, cross-ridge and hind border red ; excavation of the hind border almost obsolete : abdomen obconical, longer than the chest ; sutures of the segments and tip red : opercula none ; tymbals whitish with red borders ; drums small, pale red, wide apart : legs red ; thighs very slightly striped with black ; claws black, red at the base ; fore-hips striped with black ; fore-thighs armed with two stout teeth whose tips are black ; fore-feet pitchy : wings colourless, pale red at the base ; primitive areolet adorned with a pale tawny tinge, its sides clouded with brown ; cross-veins, the space between the second and the fore border, and the longitudinal vein between the fourth and the hind border clouded with brown ; a brown spot on the tips of the longitudinal veins of the fourth and fifth marginal areolets ; veins pale tawny, darker towards the tips, red at the base ; fore-flaps bright red ; hind-flaps pale red at the base, pale brown along the fore border. Length of the body 10 lines ; of the wings 25 lines.

*a.* South Africa. Presented by Dr. A. Smith.

#### 172. *CICADA MONILIFERA*, Mas.

*Nervus transversus* 1us subcurvus, perobliquus, angulum perobtusum fingens, 2o plus duplò ejus longitudine divisus ; 2us subcurvus, valdè obliquus, angulum perobtusum fingens, 1i longitudine ; 3us subcurvus, obliquus, angulum rectum fingens ; 4us subcurvus, obliquus, angulum acutum fingens, 3o multò longior.

Second marginal areolet a little longer than the first : first cross-vein very slightly curved, extremely slanting, forming an extremely obtuse angle, parted from the second by very much more than twice its length ; second slightly curved, very slanting, forming an extremely obtuse angle, as long as the first ; third slightly curved, slanting, forming a right angle ; fourth very slightly curved, slanting, forming an acute angle, much longer than the third ; fifth slightly curved, very slightly slanting, forming a nearly right angle. Body black, rather narrow, tawny beneath ; head a little narrower

than the fore-chest, adorned with three tawny spots along the hind border of the crown and with a tawny spot on each side of the face which is very slightly convex and not prominent: mouth tawny with a black tip reaching the middle-hips: feelers black: eyes not prominent: fore-chest narrower in front than behind; scutcheon bordered with tawny and adorned with three tawny stripes of which the side pair are oblique and have two tawny marks between each of them and the middle one, and one tawny mark between each and the side border; hind-scutcheon tawny, narrow in the middle, widened, mostly black and extending beyond the scutcheon at the base of each fore-wing, straight on each side: sides and hind border of the scutcheon of the middle-chest mostly tawny; three irregular tawny stripes on the disk; hind border not excavated: abdomen obconical, longer than the chest, adorned with a square-shaped white spot on each side of the second segment: opercula none; tymbals dark ferruginous with hoary furrows; drums pale tawny, very small, the breadth of each one equal to the space between them: legs tawny, clothed with pale tawny hairs; hips, thighs and fore-shanks striped with black; fore-feet and tips of the other feet black; claws tawny with black tips; fore-thighs armed with two stout tawny teeth which are black at the base and at the tips: wings colourless; brands rather large; first and second cross-veins and the spaces between them and between the first and the fore border clouded with brown; veins tawny, adorned with very numerous black bands; fore-flaps pale buff; hind-flaps pale buff towards the hind border. Length of the body 13 lines; of the wings 24 lines.

a. South Africa. Presented by Dr. A. Smith.

### 173. *CICADA ROSEA*, Mas.

*Nerrus transversus* 1us rectus, ferè erectus, angulum obtusum fingens, 2o sexties ejus longitudine dirisus; 2us subcurvus, sub-obliquus, angulum obtusum fingens, 1o multò longior; 3us ferè rectus, obliquus, angulum rectum fingens; 4us subcurvus, valdè obliquus, angulum acutum fingens, 3o multò longior.

Second marginal areolet about three-fourths of the length of the first: first cross-vein straight, nearly upright, forming an obtuse angle, parted from the second by six times its length; second slightly curved, slightly slanting, forming an obtuse angle, very much longer than the first; third almost straight, slanting, forming a right angle; fourth slightly curved, very slanting, forming an acute angle, very much longer than the third; fifth very slightly curved, upright, forming a right angle. Body tawny with a reddish tinge: head

small, narrower than the fore-chest, black on the crown: face convex, not prominent, with a slender black band above and a large black mark in front: eyes prominent: mouth tawny with a black tip, reaching the middle-lips: feelers black, stout: fore-chest adorned with a bright yellow middle stripe, and having on each side two black oblique stripes; the inner pair forked; a black border on each side; hind-scutcheon rather narrow, its sides slightly convex before and behind but somewhat notched on the middle part: scutcheon of the middle-chest adorned with three very large obconical black marks, the middle one much shorter and broader than the side pair; behind these are four black spots, and on each side an oblique black stripe; excavation of the hind border very slight: abdomen obconical, a little longer than the chest, black above; tip tawny, armed above with a stout spine; hind borders of the segments red: a row of tawny spots along each side: opercula none; tymbals white; drums pale tawny, rather small: legs tawny: thighs and fore-shanks streaked with black; tips of the four hinder shanks pitchy; tips of the claws black; fore-thighs armed with three black teeth: wings colourless, fawn-colour at the base, rosy red along half the length of the fore border, which from thence till near the disk is pale brown with a dark red disk; veins tawny, black towards the tips; flaps colourless, fawn-colour towards the base, pale brown along the fore borders. Length of the body 8—9 lines; of the wings 22—24 lines.

*a, b.* New Zealand. From Mr. Earl's collection.

#### 174. *CICADA NEBULOSA.*

*Cicada nebulosa*, *Oliv. Enc. Méth.* v. 752, 25, pl. 112, f. 6. *Stoll, Cic.* 28, pl. 4, f. 17.

#### 175. *CICADA MACULIPENNIS.*

*Cicada maculipennis*, *De Lap. Ann. Soc. Ent. Fr.* i. 412, 47. *Germ. Silb. Rev. Ent.* ii. 72, 38.

*Cicada versicolor*, *Brullé, Hist. Nat. Hém.* ii. pl. 5, f. 1.

*Cicada sumptuosa*, *Blanch. Hist. Nat. Ins.* iii. 165, 4.

*Var. Cicada semicosta*, *Germ.*

*Var. Cicada diaphana*, *Germ.*

*Hemisciera maculipennis*, *Amyot et Serv. Hist. Nat. Hém.* 467, 1

*a.* South Africa. Presented by Dr. A. Smith.

*b—f.* Cape. From Mr. Dregé's collection.

*g.—i.* Cape.



176. *CICADA SUBVITTA*, Mas.

*Nervus transversus* 1us *subcurvus*, *subobliquus*, *angulum subacutum* *figens*, 2o *plus ejus longitudine divisus*; 2us *subcurvus*, *subobliquus*, *angulum subobtusum figens*, 1o *paullo longior*; 3us *subcurvus*, *subobliquus*, *angulum subacutum figens*; 4us *subcurvus*, *obliquus*, *angulum subacutum figens*, 3o *longior*.

Second marginal areolet a little longer than the first: first cross-vein very slightly curved, very slightly slanting, forming a slightly acute angle, parted from the second by much less than twice its length; second very slightly curved, slightly slanting, forming a slightly obtuse angle, a little longer than the first; third slightly curved, slightly slanting, forming a slightly acute angle; fourth slightly curved, slanting, forming a slightly acute angle, longer than the third; fifth nearly straight, very slightly slanting, forming a right angle. Body black, almost hairless: head narrower than the fore-chest; a small tawny spot on the crown between the eyelets and the hind border; face very convex, rather prominent: mouth black, reaching the middle-hips: eyes rather prominent: feelers black, stout: fore-chest rather narrower in front than behind; scutcheon adorned with a slender tawny stripe which extends from the fore border to the hind border; hind-scutcheon very narrow in the middle, slightly angular and much widened by the base of each fore-wing, nearly straight on each side: hind border of the scutcheon of the middle-chest not excavated: abdomen pitchy, obconical, a little longer than the chest, ferruginous at the tip; under side ferruginous, tawny towards the tip: opercula none; tymbals large, pale brown; drums tawny, very small, widely apart: legs black; thighs striped with red; claws and hind-feet tawny; fore-thighs armed with three tawny teeth, of these one is very long and two are of moderate size; hind-shanks tawny towards the tips: wings colourless, whitish and tinged with red at the base; veins pale tawny, black towards the tips; primitive areolet and adjoining veins clouded with brown; fore-wings adorned with two oblique dark brown bands, the first interrupted, the second occupying the cross-veins but not reaching the hind border; a small dark brown spot on the tip of the fore border; a row of pale brown spots occupy the tips of the veins of the sub-marginal areolets; fore membranes whitish: hind-wings adorned with a broad interrupted oblique brown band which here and there communicates with the base along the borders of the veins; flaps colourless, brown along the fore border and towards the base where they are whitish; veins tawny, black towards the tips. Length of the body  $7\frac{1}{2}$  lines; of the wings 18 lines.

a. North India. From Mr. Warwick's collection.

## 177. CICADA COLEOPTRATA, Mas.

*Nervus transversus* 1us rectus, obliquus, angulum obtusum fingens, 2o paullo plus duplò ejus longitudine divisus; 2us subcurvus, valde obliquus, angulum perobtusum fingens, 1o multò longior; 3us curvus, obliquus, angulum rectum fingens; 4us subcurvus, obliquus, angulum subacutum fingens, 3o longior.

Second marginal areolet a little longer than the first; first cross-vein straight, slanting, forming an obtuse angle, parted from the second by a little more than twice its length; second slightly curved, very slanting, forming an extremely obtuse angle, much longer than the first; third curved, slanting, forming a right angle; fourth slightly curved, slanting, forming a slightly acute angle, longer than the third; fifth nearly straight, upright, forming a hardly obtuse angle. Body black, dull, almost hairless: head nearly as broad as the fore-chest: a very slight tawny mark on the crown, extending from the hind border to the eyelets: face prominent, very convex: mouth tawny with a black tip, reaching the middle-lips: eyes prominent: feelers black: fore-chest hardly narrower in front than behind; scutcheon adorned with a slender tawny stripe which disappears before the hind border, and with a narrow tawny border; hind-scutcheon tawny, narrow above, a little widened and forming a slightly obtuse angle near the base of the fore-wing where it is black and extends beyond the scutcheon: sides, cross-ridge and hind border tawny, the latter hardly excavated: abdomen nearly elliptical, slightly ridged on the back, somewhat longer than the chest; under side pale tawny with the exception of a broad black stripe which does not reach the hind border: opercula none; tymbals tawny with a hoary tinge; drums pale tawny, black towards the base, rather small, some distance apart: legs tawny; thighs mostly black with tawny stripes; shanks black at the base and towards the tips; claws and tips of the feet pitchy: fore-hips black with tawny stripes; the other hips black with tawny tips; fore-thighs armed with four black teeth, two of which are large, and two small and close together: fore-wings clouded with very pale brown, almost colourless here and there along the fore border; a very slender brown band across the middle; first and second cross-veins and the space between them clouded with very dark brown; veins and fore membranes pale tawny, the former darker towards the tips; hind-wings colourless, very slightly tinged with brown towards the base; veins yellow; flaps colourless, whitish at the base and along part of the fore border. Length of the body 8 lines; of the wings 17 lines.

a ——— ? From Mr. Shuckard's collection.

178. *CICADA GRACILIS*, Fem.

*Nervus transversus* 1us *subcurvus*, *subobliquus*, *angulum rectum* *figens*, 2o *quadruplò ejus longitudine divisus*; 2us *rectus*, *subobliquus*, *angulum obtusum figens*, 1o *multò brevior*; 3us *subcurvus*, *subobliquus*, *angulum rectum figens*; 4us *subcurvus*, *subobliquus*, *angulum subacutum figens*, 3o *multò longior*.

Second marginal arcole longer than the first: first cross-vein very slightly curved, slightly slanting, forming a right angle, parted from the second by four times its length; second straight, slightly slanting, forming an obtuse angle, much shorter than the first; third very slightly curved, slightly slanting, forming a right angle; fourth slightly curved, slightly slanting, forming a slightly acute angle, much longer than the third; fifth curved, nearly upright, forming an almost right angle. Body black, slender, tawny beneath: head much narrower than the fore-chest, clothed with short yellow hairs, adorned with a tawny spot on each side in front by the base of the feelers; face prominent, very convex, clothed with pale hairs, adorned with a tawny stripe in the middle and with a tawny band on each side: mouth tawny with a black tip: eyes rather large and prominent: feelers black, stout, tawny towards the tips: fore-chest narrower before than behind, adorned with four tawny spots, two on the fore border and two on the hind border, the latter are more remote from each other than the former pair; hind-scutcheon tawny, rather narrow in the middle, widened, extending beyond the scutcheon and adorned with a short black stripe by the base of each forewing, nearly straight on each side: scutcheon of the middle-chest tawny on each side, its disk adorned with two tawny streaks which are much widened towards the hind border, the latter is hardly excavated: abdomen obconical, longer and a little narrower than the chest, clothed with whitish hairs, ferruginous on each side; under side adorned with a row of ferruginous spots: oviduct ferruginous: legs tawny, adorned with pitchy stripes; feet pitchy; claws ferruginous with pitchy tips; fore-thighs armed with three stout ferruginous teeth; spines on the hind-shanks ferruginous, very long: wings colourless; fore border yellow; veins tawny; a broad oblique stripe proceeds from the fore border and clouds the cross-veins from the first to the fourth, and the intermediate parts of the longitudinal veins, and is broadest beneath the fore border: fore-flaps pale buff; veins of the hind-wings pale tawny; flaps pale buff at the base and along part of the hind border. Length of the body  $7\frac{1}{2}$  lines; of the wings 18 lines.

a. South Africa. Presented by Dr. A. Smith.

179. *CICADA OCCIDENTIS*. Mas.

*Nervus transversus* 1us rectus, obliquus, angulum valdè obtusum fignens, 2o ferè duplò ejus longitudine divisus; 2us subcurvus, ferè erectus, angulum obtusum fignens, 1o viè longior; 3us rectus, obliquus, angulum subacutum fignens; 4us ferè rectus, obliquus, angulum acutum fignens, 3o multò longior.

Second marginal arcolelet longer than the first: first cross-vein straight, slanting, forming a very obtuse angle, parted from the second by nearly twice its length; second slightly curved, almost upright, forming an obtuse angle, hardly longer than the first; third straight, slanting, forming a slightly acute angle; fourth almost straight, forming an acute angle, much longer and more slanting than the third; fifth straight, upright, forming a hardly obtuse angle. Body ferruginous, partly covered with pale yellow shining down: head a little narrower than the fore-chest; crown black; face convex, adorned with a black stripe and on each side with black bands: eyes not prominent: mouth tawny with a black tip, reaching the middle-hips: feelers black; fore-chest not narrower in front: scutcheon adorned with three black bands, the side pair short; sutures black; hind-scutcheon very narrow, slightly widened at the base of each fore-wing, excavated on each side: middle-chest adorned with four obconical black stripes, the outer pair longer than the inner pair; hind border very slightly excavated: abdomen obconical, not longer than the chest, black above; hind borders of the segments ferruginous: legs pale ferruginous, streaked with black; fore-thighs armed with three teeth, two long and one short: wings colourless, short; fore border pale green; veins pale green, black towards the tips; hind-flaps at the base and fore-flaps pale red. Length of the body  $6\frac{1}{2}$  lines; of the wings 16 lines.

a. West Coast of America. Presented by Capt. Kellett and Lieut. Wood.

180. *CICADA HYALINA*.

*Cicada hyalina*, Oliv. *Enc. Méth.* v. 756, 42, pl. 113. f. 4. Stoll, *Cic.* 76, pl. 19, f. 104.

a, b. Italy. Presented by Dr. Dowler.

181. *CICADA PICTA*.

*Cicada picta*, *Germ. Thon, Arch.* ii. 2, 66. *Silb. Rev. Ent.* ii. 58, 7. *Reaum. Ins.* v. 152, pl. 16, f. 8, 9?

*Tettigonia picta*, *Fabr. Ent. Syst.* iv. 24, 27. *Syst. Rhyn.* 42, 43. *Coq. Ill.* i. 31, pl. 8, f. 2.

*Cicada tomentosa*, *Oliv. Enc. Méth.* v. 759, 62.

*Cicado*, *Amyot, Ann. Soc. Ent. Fr. 2me Série*, v. 154, 375.

a. South of France. Presented by M. Jaret.

b. Albania. Presented by S. Saunders, Esq.

c. South of France. Presented by F. Walker, Esq.

d, e. Europe.

182. *CICADA HÆMATODES*.

*Cicada hæmatodes*, *Linn. Syst. Nat.* i. 2, 707, 14. *Petiv. Gaz.* pl. 15, f. 7. *Scop. Ent. Carn.* 347. *Schrank, Ins. Austr.* 477. *Gron. Zooph.* 675. *Fuessl. Ins. Helv.* 24, 452. *Stoll, Cic.* 24, pl. 2, f. 11. *Gmel. Ed. Syst. Nat.* i. 3, 2097, 24. *Vill. Ent.* i. 456, 5. *Oliv. Enc. Méth.* v. 753, 31, pl. 112, f. 8? *Germ. Thon, Arch.* ii. 2, 41. *Silb. Rev. Ent.* ii. 58, 6.

*Tettigonia hæmatodes*, *Fabr. Syst. Ent.* 680, 11. *Sp. Ins.* ii. 320, 14. *Mant. Ins.* ii. 267, 18. *Ent. Syst.* iv. 22, 21. *Syst. Rhyn.* 42, 50. *Panz, Faun. Germ.* 50, pl. 21?

*T. sanguinea*, *Fabr. Syst. Rhyn.* 39, 31.

*Tibicen hæmatodes*, *Latr. Règn. Anim.* 1829, 215.

*Cicada Anglica*, *Leach, Samouelle, Comp.* pl. 5, f. 2. *Curt. Brit. Ent.* 392.

*Tibicina*, *Amyot, Ann. Soc. Ent. Fr. 2me Série*, v. 154, 374.

*Cicada sanguinea*, *Germ. Thon, Arch.* ii. 2, 47. *Silb. Rev. Ent.* ii. 58, 5.

a—c. England.

d. Europe. Presented by M. Gourreau.

e, f. Europe.

g, h. South of France.

i, j. ———?

k. Ukraine. Presented by Dr. Dowler.

183. *CICADA TIBIALIS*.

*Tettigonia tibialis*, *Panz. Faun. Ins. Germ.* v. 1. *Stoll, Cic.* 92,  
pl. 24, f. 133.

*Cicadetta*, *Amyot, Ann. Soc. Ent. 2me Série*, v. 156, 377.

184. *CICADA MONTANA*.

*Cicada montana*, *Passerini*.

*a, b.* Tuscany.

*c, d.* Italy. From Mr. Birch's collection.

185. *CICADA ANNULATA*.

*Tibicen annulatus*, *Brullé, Expéd. Scient. de Morée, Atlas*, pl. 31,  
f. 14.

186. *CICADA FLAVEOLA*.

*Tibicen flavcolus*, *Brullé, Expéd. Scient. de Morée, Atlas*, pl. 31, f.  
13.

187. *CICADA HYALINATA*.

*Tibicen hyalinatus*, *Brullé, Expéd. Scient. de Morée, Atlas*, pl. 31,  
f. 12.

188. *CICADA VITREA*.

*Tibicen vitreus*, *Brullé, Expéd. Scient. de Morée, Atlas*, pl. 31, f. 11.

189. *CICADA MONETA*.

*Cicada moneta*, *Germ. Silb. Rev. Ent.* ii. 61, 14.

*a---d.* ———? Presented by J. G. Children, Esq.

*e, f.* ———?

190. *CICADA SEMIPUNCTATA*.

*Cicada semipunctata*, *Germ. Thon, Archiv*.

*a.* Cape. From M. Dregé's collection.

191. *CICADA SIGNIFERA.*

*Cicada signifera*, *Germ. Thon, Arch.* ii. 2, 80. *Silb. Rev. Ent.* ii. 73, 41.

*a.* Cape. From M. Dregé's collection.

192. *CICADA SCRIPTA.*

*Cicada scripta*, *Germ. Silb. Rev. Ent.* ii. 73, 43.

*a.* Cape. From M. Dregé's collection.

193. *CICADA SIMPLEX.*

*Cicada simplex*, *Germ. Silb. Rev. Ent.* ii. 72, 40.

*a.* South Africa. Presented by Dr. A. Smith. \*

*b.* Cape. From M. Dregé's collection.

194. *CICADA BICOLOR.*

*Cicada bicolor*, *Oliv. Enc. Méth.* v. 748, 9.

*a.* Brazil. Presented by the Entomological Club.

195. *CICADA LUTESCENS.*

*Cicada lutescens*, *Oliv. Enc. Méth.* v. 758, 56, pl. 113, f. 12.

196. *CICADA PRASINA.*

*Cicada prasina*, *Pall. It.* ii. App. 84. *Gmel. Ed. Syst. Nat.* i. 3, 2100, 96.

*Cicada lutescens*, *Var. ?*

197. *CICADA VIOLACEA.*

*Cicada violacea*, *Linn. Syst. Nat.* i. 2, 708, 21. *Mus. Lud. Utr.* 162. *Fuesl. Ins. Helv.* 24, 456. *Gmel. Ed. Syst. Nat.* i. 3, 2100, 21. *Vill. Ent.* i. 458, 8. *Oliv. Enc. Méth.* v. 757, 51.

*Tettigonia violacea*, *Fabr. Syst. Ent.* 682, 18. *Sp. Ins.* ii. 322, 22. *Mant. Ins.* ii. 267, 27. *Ent. Syst.* iv. 26, 36. *Syst. Rhyn.* 43, 56.

## 198. CICADA MEZAMMIRA.

Mezammira, *Amyot, Ann. Soc. Ent. Fr. 2me Série*, v. 157, 379.

## 199. CICADA MELAMPSALTA.

Melampsalta, *Amyot, Ann. Soc. Ent. Fr. 2me Série*, 165, 376.

## 200. CICADA PUSILLA.

Tettigonia pusilla, *Fabr. Syst. Rhyn.* 44, 59.

## 201. CICADA PARVULA.

Cicada pygmaea, *Oliv. Enc. Méth.* v. 762, 66.

## 202. CICADA VITELLINA.

Cicada vitellina, *Germ.*

## 203. CICADA TRANSVERSA.

Cicada transversa, *Germ. Thon, Arch.* ii. 2, 85. *Silh. Rev. Ent.* ii. 63, 19.

## 204. CICADA ÆSTUANS.

Tettigonia æstuans, *Fabr. Ent. Syst.* iv. 20, 14. *Syst. Rhyn.* 37, 20.

Tettigetta, *Amyot, Ann. Soc. Ent. Fr. 2me Série*, v. 156, 378.

## 205. CICADA PYGMÆA.

Tettigonia pygmæa, *Fabr. Syst. Rhyn.* 44, 57.

## 206. CICADA ATRA.

Cicada atra, *Oliv. Enc. Méth.* v. 759, 63.

Cicadatra, *Amyot, Ann. Soc. Ent. Fr. 2me Série*, v. 153, 373.

a. South of France.



207. *CICADA CONCINNA.*

*Cicada concinna*, *Germ. Thon, Arch.* ii. 2, 42. *Silb. Rev. Ent.* ii. 63, 22.

*Cicada atra*? *Oliv.*

208. *CICADA QUÆRULA.*

*Cicada quærula*, *Pallas, Reizen*, ii. *Append.* 83. *Goeze, Ent. Beytr.* ii. 151, 17. *Stoll, Cic.* 20, pl. 1, f. 6.

*Cicada atra*? *Oliv.*

209. *CICADA ALGIRA.*

*Tettigonia Algira*, *Fabr. Syst. Rhyn.* 43, 51.

210. *CICADA VACUA.*

*Cicada vacua*, *Oliv. Enc. Méth.* v. 757, pl. 113, f. 10. *Stoll, Cic.* 51, pl. 12, f. 58.

211. *CICADA MARGINELLA.*

*Cicada marginella*, *Oliv. Enc. Méth.* v. 757, 49, pl. 113, f. 8. *Stoll, Cic.* 87, pl. 23, f. 124.

212. *CICADA CINCTA.*

*Tettigonia cincta*, *Fabr. Syst. Rhyn.* 38, 26.

213. *CICADA BRUNNEA.*

*Tettigonia brunnea*, *Fabr. Ent. Syst. Suppl.* 517, 35. *Syst. Rhyn.* 43, 55.

214. *CICADA DIMIDIATA.*

*Cicada dimidiata*, *Oliv. Enc. Méth.* v. 755, 41. *Stoll, Cic.* 85, pl. 22, f. 119.

## 215. CICADA 8-GUTTATA.

*Tettigonia 8-guttata*, *Fabr. Ent. Syst. Suppl.* 515, 23. *Syst. Rhyn.* 39, 33. *Coqueb. Ill.* 1, pl. 9, f. 1.

## 216. CICADA OCHRACEA.

*Cicada ochracea*, *Germ.*

## 217. CICADA OBSCURA.

*Tettigonia obscura*, *Fabr. Syst. Rhyn.* 36, 14.

## 218. CICADA MUSIVA.

*Cicada musiva*, *Germ. Thon, Arch.* ii. 2, 81. *Silb. Rev. Ent.* ii. 62, 16.

## 219. CICADA MUSCARIA.

*Tettigonia muscaria*, *Fabr. Syst. Rhyn.* 44, 60.

## 220. CICADA LEUCOPTERA.

*Cicada leucoptera*, *Germ. Thon, Arch.* ii. 2, 23. *Silb. Rev. Ent.* ii. 74, 44.

## 221. CICADA EPIHEMERA.

*Tettigonia Ephemera*, *Fabr. Ent. Syst.* iv. 25, 34. *Syst. Rhyn.* 43, 52.

## 222. CICADA FENESTRATA.

*Tettigonia fenestrata*, *Fabr. Syst. Rhyn.* 43, 54.

## 223. CICADA CANTANS.

*Tettigonia cantans*, *Fabr. Ent. Syst.* iv. 20, 13. *Syst. Rhyn.* 37, 19.

## 224. CICA DA ? FORNICATA.

*Cicada ? fornicata*, *Linn. Syst. Nat.* 706, 11. *Mus. Lud. Ubr.* 156.  
*Oliv. Enc. Méth.* v. 758, 54.

## Genus 13. TETTIGADES.

*Tettigades*, *Amyot et Serville, Hist. Nat. Hém.* 469, 369.

## 1. TETTIGADES CHILENSIS.

*Tettigades chilensis*, *Amyot et Serv. Hist. Nat. Hém.* 470, 1, pl. 12,  
 f. 14.

*a—c.* Chili. From Mr. Cuming's collection.

*d.* Coquimbo.

## Genus 14. CEPHALOXYs.

*Cephaloxys*, *Signoret, Ann. Soc. Ent. Fr. 2me Série*, v. 294.

## 1. CEPHALOXYs VIRIDIS.

*Cephaloxys viridis*, *Signoret, Ann. Soc. Ent. Fr. 2me Série*, v. 294,  
 1.

## 2. CEPHALOXYs HEMELYTRA.

*Cephaloxys hemelytra*, *Signoret, Ann. Soc. Ent. Fr. 2me Série*, v.  
 295, 2.

## 3. CEPHALOXYs MICROCEPHALA, Mas.

*Nerrus transversus* 1us subcurvus, erectus, angulum vix obtusum  
 fingens, 2o plus duplè ejus longitudine divisus; 2us sub-  
 curvus erectus, angulum vix obtusum fingens, 1o paullò lon-  
 gior; 3us ferè rectus, obliquus, angulum acutum fingens;  
 4us ferè rectus, subobliquus, angulum subacutum fingens, 3o  
 paullò brevior.

Second marginal areolet two-thirds of the length of the first :  
 first cross-vein very slightly curved, upright, forming a hardly obtuse

angle, parted from the second by very much more than twice its length; second very slightly curved, upright, forming a hardly obtuse angle, a little longer than the first; third nearly straight, slanting, forming an acute angle; fourth nearly straight, forming a slightly acute angle, much less slanting and a little shorter than the third; fifth straight, slightly slanting, forming an obtuse angle. Body grass-green: disks of the head, of the chest and of the abdomen towards the base more or less tinged with tawny: head very small, much narrower than the fore-chest; face very convex, rather prominent: mouth pale tawny, reaching the middle-hips: eyes rather prominent: feelers black, pale tawny at the base: fore-chest decreasing much in breadth from the hind border to the fore border: sides straight, rounded at the base of the wing: hind-scutcheon narrow above, much broader on each side: no excavation on the hind border of the scutcheon of the middle-chest: abdomen obconical, tawny beneath, much longer than the chest; drums green, very small, parted by a broad interval: legs green, tinged with tawny: feet pitchy; claws black; fore-thighs armed with three stout tawny teeth whose tips are black: wings colourless, tinged with green at the base; a green stripe with a tawny tinge along two-thirds of the fore border; veins tawny; green towards the base, black towards the tips. Length of the body 8 lines; of the wings 22 lines.

*a, b.* Port Natal. From M. Guenzius' collection.

#### 4. CEPHALOXYS ROSTRATA, Mas.

*Nervus transversus* 1us rectus, subobliquus, angulum rix obtusum fingens, 2o quadruplò ejus longitudine divisus; 2us erectus, ferè rectus, angulum obtusum fingens, 1o longior; 3us ferè rectus, valdè obliquus, angulum acutum fingens; 4us rectus, obliquus, angulum rectum fingens, 3o multò brevior.

Second marginal areolet about five-sixths of the length of the first: first cross-vein straight, slightly slanting, forming a hardly obtuse angle, parted from the second by full four times its length; second upright, nearly straight, forming an obtuse angle, longer than the first; third nearly straight, very slanting, forming an acute angle, joining the base of the fourth marginal areolet; fourth straight, slanting, forming a right angle, very much shorter than the third; fifth very slightly curved, slightly slanting, forming a right angle. Body vivid grass-green, tawny beneath, partly clothed with whitish shining down: head small, narrower than the fore-chest; face conical, remarkably prominent, forming a short horn; mouth tawny with a black tip, reaching the middle-hips: feelers tawny: eyes rather

prominent: fore-chest narrower in front than behind; sides of the scutcheon straight; hind-scutcheon narrow above, much widened on each side: scutcheon of the middle-chest adorned with three broad obconical tawny stripes whose disks are mottled with brown; excavation on the hind border very indistinct: abdomen ferruginous, slightly obconical, not longer than the chest, green for half the length from the base with the exception of a stripe in the middle: opercula none; tymbals adorned with pitchy and whitish stripes; drums rather small, pale tawny, parted by a moderate interval: legs tawny; tips of the claws black; fore-thighs adorned with pitchy streaks, armed with two tawny teeth whose tips are black; wings colourless, narrow, tinged with green at the base of the fore-wings; fore borders brown; veins black, green towards the base: flaps colourless. Length of the body 7 lines; of the wings 20 lines.

a. Java. From Mr. Argent's collection.

##### 5. CEPHALOXYS NUTANS, Mas.

*Nervus transversus 1us ferè rectus, erectus, angulum subobtusum fingens, 2o plus quadruplò ejus longitudine divisus; 2us subrectus, erectus, angulum obtusum fingens, 1o longior; 3us ferè rectus, obliquus, angulum acutum fingens; 4us ferè rectus, angulum ferè rectum fingens, subobliquus, 3o vix brevior.*

Second marginal areolet about five-sixths of the length of the first: first cross-vein almost straight, upright, forming a very slightly obtuse angle, parted from the second by much more than four times its length; second nearly straight, upright, forming an obtuse angle, longer than the first; third nearly straight although very indistinctly waved, slanting, forming an acute angle; fourth nearly straight, forming an almost right angle, nearly as long as the third and much less slanting; fifth very slightly curved, upright, forming a right angle. Body pale tawny: head a little narrower than the fore-chest, somewhat pitchy about the eyelets and having on each side a pitchy stripe which proceeds from the base of the feelers along the sides of the eyes; face conical, very long and prominent like a beak, adorned above with a dark tawny stripe: mouth pale tawny with a black tip, extending a little beyond the base of the fore-lips: eyes prominent: feelers black, tawny at the base: scutcheon of the fore-chest rather long, adorned with six black spots in front, with a black obconical stripe occupying a furrow on each side, and with two pitchy spots on the hind border; hind-scutcheon narrow above, much broader at the base of the fore-wing where it forms a distinct angle, and extends beyond the scutcheon: middle-chest adorned on each side with

two slightly oblique stripes which are composed of little brown marks various in size and in shape; hind border hardly excavated; abdomen obconical, longer and a little broader than the chest: opercula none; tymbals large, pale ferruginous; drums tawny, extremely small: legs tawny; feet darker; tips of the claws black; fore-thighs armed with two stout tawny teeth: wings colourless, rather long, very narrow, with a very slight tawny tinge at the tips and along the hind border of the fore-wings; fore border tawny with a short brown stripe beneath at the base; veins tawny, black towards the tips: a slight brown stripe along the hind border; fore-flaps red; hind-flaps colourless, tawny at the base and along the fore border and hind border. Length of the body 8 lines; of the wings 22 lines.

#### 6. CEPHALOXYS CONCOLOR, Fem.

*Nervus transversus* *1us* *ferè* *rectus, subrectus, angulum subobtusum* *figens, 2o* *ferè* *sexties ejus longitudine* *dirisus; 2us* *ferè* *rectus, subobliquus, angulum obtusum* *figens, 1o* *longior; 3us* *ferè* *rectus, obliquus, angulum subacutum* *figens; 4us* *ferè* *rectus, obliquus, angulum subacutum* *figens, 3o* *paulld* *longior.*

Second marginal areolet nearly two-thirds of the length of the first: first cross-vein nearly straight, almost upright, forming a slightly obtuse angle, parted from the second by near six times its length; second nearly straight, slightly slanting, forming an obtuse angle, longer than the first; third very nearly straight, slanting, forming a slightly acute angle; fourth nearly straight, slanting, forming a slightly acute angle, a little longer than the third; fifth curved, nearly upright, forming a right angle. Body rather pale red: head small, narrower than the chest; face convex, compressed, very prominent: mouth tawny with a black tip: feelers black: fore-chest narrower in front; hind-scutcheon narrow above, broader on each side: scutcheon of the middle-chest nearly smooth with the exception of the furrow on the hind border which is very slightly excavated: a broad whitish stripe on each side of the breast: abdomen very slightly obconical, about twice the length of the chest, adorned beneath with two rows of black spots: oviduct dark ferruginous with a black tip: legs tawny; tips of the claws black; fore-thighs armed with three teeth whose tips are black: wings and their flaps colourless; veins and fore border very pale red. Length of the body 13 lines; of the wings 24 lines.

## 7. CEPHALOXYS LOCUSTA, Fem.

*Nervus transversus* 1us subcurvus, subobliquus, angulum valdè obtusum fingens, 2o plus duplò ejus longitudine divisus; 2us subcurvus, subobliquus, angulum obtusum fingens, 1o multò brevior; 3us curvus, subobliquus, angulum rectum fingens; 4us subcurvus, obliquus, angulum subacutum fingens, 3o longior.

Second marginal areolet full three-fourths of the length of the first: first cross-vein slightly curved, slightly slanting, forming a very obtuse angle, parted from the second by much more than twice its length; second slightly curved, slightly slanting, forming an obtuse angle, much shorter than the first; third curved, slightly slanting, forming a right angle; fourth slightly curved, slanting, forming a slightly acute angle, longer than the third; fifth slightly curved, upright, forming a nearly right angle. Body ferruginous, pale tawny beneath: head small, much narrower than the fore-chest, adorned with two small black spots between the eyelets; face narrow, very convex and prominent: mouth pale tawny with a pitchy tip, reaching the middle-hips: eyes prominent: feelers tawny: fore-chest much narrower in front than behind; scutcheon adorned with two slender black stripes, which slightly converge from the fore border, and then slightly diverging include a nearly circular space and are united on the hind border; a small black spot on each side in front; hind-scutcheon tawny, broad especially on each side, rounded at the base of each fore-wing, slightly excavated towards the fore border: scutcheon of the middle-chest adorned with three slender black stripes, the side pair slightly converging towards the tip of the middle one; two punctures above the cross-ridge which is very distinct; sides and hind border tawny, covered with pale yellow silky down: excavation on the hind border very slight: abdomen pale tawny, obconical, much longer than the chest, lengthened and tapering towards the tip, adorned above with a very broad ferruginous stripe which extends from the base to the narrow part; a row of small pitchy spots along each side; last segment much lengthened, obconical, pitchy above at the base; horn at the tip tawny, rather long; sheaths of the oviduct pale tawny, pitchy and hairy towards the tip, extending some distance beyond the tip of the abdomen; oviduct ferruginous, black and serrated at the tip: legs pale tawny; fore-thighs armed with three tawny teeth, first and second of moderate size, the third very small: wings colourless; primitive areolet, fore border and veins pale tawny; fore membranes pale

buff; flaps pale buff at the base and for a space along the hind border. Length of the body 24 lines; of the wings 42 lines.

a. East Indies. From Mr. Wooler's collection.

# 8. CEPHALOXYS LACTEIPENNIS, Mas.

*Nereus transversus* 1us rectus, obliquus, angulum valdè obtusum fingens, 2o plus duplò ejus longitudine divisus; 2us subcurvus, obliquus, angulum valdè obtusum fingens, 1o longior; 3us curvus, obliquus, angulum ferè rectum fingens; 4us subcurvus, valdè obliquus, angulum ferè rectum fingens, 3i longitudine.

Second marginal areolet longer than the first: first cross-vein straight, slanting, forming a very obtuse angle, parted from the second by more than twice its length; second slightly curved, slanting, forming a very obtuse angle, longer than the first; third curved, slanting, forming a nearly right angle; fourth very slightly curved, very slanting, forming a nearly right angle, as long as the third; fifth curved, upright, forming a slightly acute angle. Body luteous, clothed with pale hairs: head black, small, much narrower than the thorax; a small tawny spot at the base of each feeler; face very prominent, adorned on each side with a large tawny spot: mouth black, tawny at the base: eyes not prominent: feelers black: fore-chest much narrower in front than behind; sides rounded at the base of the fore-wings, then slightly concave, and again slightly convex and minutely notched towards the fore border: furrows of the scutcheon black; hind-scutcheon broad, a black band along its fore border: scutcheon of the middle-chest adorned with four black obconical slightly excavated marks; middle pair not more than half the length of the side pair, between the former there is a black stripe increasing in breadth from the fore border to the middle where it ceases; hind border very slightly excavated: abdomen black, obconical, a little broader and longer than the chest; hind borders of the segments tawny; a tawny spot on each side near the tip which is also tawny: opercula tawny, small, open; their furrows hoary; drums extremely small: legs luteous; a pitchy spot at the tip of each shank; tips of the claws black; fore-thighs armed with two stout teeth which are partly black at the base: wings and flaps white, opaque, luteous at the base; veins black, tawny towards the base and near the brand, an additional cross-vein near the tip of the sixth discoidal areolet of the left wing of the specimen described. Length of the body 17 lines; of the wings 46 lines.

a. North India. From Mr. Stevens's collection.



## 9. CEPHALOXYS QUADRIMACULA, Mas.

*Nervus transversus* 1us subcurvus, subobliquus, angulum obtusum fignens, 2o duplò ejus longitudine divisus; 2us fere rectus, obliquus, angulum perobtusum fignens, 1o multò longior; 3us subundatus, valdè obliquus, angulum acutum fignens; 4us subcurvus, obliquus, angulum subacutum fignens.

Second marginal areolet as long as the first: first cross-vein slightly curved, slightly slanting, forming an obtuse angle, parted from the second by full twice its length; second nearly straight, slanting, forming an extremely obtuse angle, much longer than the first; third very slightly waved, very slanting, forming an acute angle; fourth slightly curved, slanting, forming a slightly acute angle, shorter than the third; fifth curved, upright, forming a slightly acute angle. Body bright tawny, almost hairless: head black, narrower than the fore-chest, adorned with a large tawny spot on each side at the base of the feelers, with a small tawny spot in front, and with three along the hind border; face prominent, very convex: mouth black, reaching the hind-hips, tawny at the base: feelers black: eyes rather prominent: fore-chest much narrower in front than behind; scutcheon adorned with a slightly curved black stripe on each side, with two triangular black spots on the fore border, and with three small black spots along the hind border, and it has also a few very indistinct pitchy marks in the disk; hind-scutcheon much widened near the base of each fore-wing where it greatly exceeds the breadth of the scutcheon, slightly notched on each side: scutcheon of the middle-chest adorned with four very large black spots; outer pair obconical, slightly oblique, widened to each other at the base, on the inner side they are slightly excavated by a short very slender oblique tawny stripe; third spot much shorter, and exhibits a tendency to be divided into two U-shaped spots, the fourth is behind the third, and of a quadrate form, and bears a slender cone on its fore border; hind border not excavated: abdomen obconical, longer and narrower than the chest, black above; hind borders of the segments adorned with slender interrupted reddish bands; a broad pale tawny band near the tip; horn pale tawny; under side pitchy; hind borders of the segments ferruginous; tip pale tawny: operecula very small, pale tawny with blackish disks, partly covering the tymbals which are grayish; drums bright tawny, rather small, not far apart: legs tawny; hips, middle and hind-thighs and hind-shanks striped with black; claws ferruginous: fore-thighs black with a tawny spot near the tip, armed with three stout black teeth; fore-shanks black with a slender tawny band near the

base; middle-shanks black; fore and middle-feet pitchy, ferruginous at the base; hind-feet tawny with pitchy tips: wings whitish, pale tawny and marked with black at the base; fore border bright tawny; brands pale brown; veins pale tawny, black towards the tip of the fore-wings; first and second cross-veins and the space between them and the fore border clouded with very dark brown; fore-flaps pale tawny; first and second cross-veins of the hind-wings and the space between them clouded with very dark brown; flaps white at the base and along some part of the hind border. Length of the body 14 lines; of the wings 27 lines.

a. North India. From Mr. Stevens's collection.

#### 10. CEPHALONYS TERPSICHOE, Fem.

*Nervus transversus* *1us subcurvus, obliquus, angulum obtusum fingens, 2o plus duplò ejus longitudine divisus; 2us ferè rectus, obliquus, angulum valdè obtusum fingens, Vi dimidio vix longior; 3us subundatus, subobliquus, angulum rectum fingens; 4us ferè rectus, obliquus, angulum subacutum fingens, 3o paulò longior.*

Second marginal areolet about two-thirds of the length of the first: first cross-vein slightly curved, slanting, forming an obtuse angle, parted from the second by much more than twice its length; second nearly straight, slanting, forming a very obtuse angle, hardly more than half the length of the first; third very slightly waved, slightly slanting, forming a right angle; fourth nearly straight, slanting, forming a very slightly acute angle, a little longer than the third; fifth curved, upright, forming a slightly acute angle. Body pale green, slightly tinged with tawny, slightly clothed with white shining down: head narrower than the fore-chest; a black dot on the crown on each side of the eyelets; face narrow, very convex and prominent: mouth pale tawny with a pitchy tip, reaching a little beyond the middle-hips: eyes prominent: feelers tawny: hind-scutcheon of the fore-chest broad, especially at the base of the fore-wings where it is rounded; its sides slightly excavated: scutcheon of the middle-chest adorned with a pitchy dot on each side above the cross-ridge: hind border not excavated: abdomen obconical, a little shorter than the chest, narrow at the tip; two last segments pitchy above: oviduct pitchy: legs pale tawny, tinged with green; claws black towards the tips; fore-thighs armed with two tawny teeth, one of moderate size, the other small: wings colourless; fore-wings tinged with brown towards the tips; fore border green, slightly beset with spines, the middle part black; veins

black, green towards the base, black along the hind border of the fore-wing; fore membrane buff; flaps buff and tinged with red at the base and for a space along the hind border. Length of the body 12 lines; of the wings 35 lines.

*a.* East Indies. From Archdeacon Clerk's collection.

### Genus 15. CARINETA.

*Carineta*, *Amyot et Serr. Hist. Nat. Hém.* 482, 376, 19.

#### 1. CARINETA FORMOSA.

*Carineta formosa*, *Amyot et Serr. Hist. Nat. Hém.* 483, 1.

*Cicada formosa*, *Germ. Thon, Arch.* ii. 2, 105. *Silb. Rev. Ent.* ii. 74, 47. *Burm. Handb. Ent.* ii. 1, 181, 3. *Blanch. Hist. Nat. Ins.* iii. 166, 8. *Guér. Icon. Reg. Anim. Texte*, 355.

*Cicada Diardi*, *Guér. Icon. Reg. Anim. Ins.* pl. 58, f. 1.

*Cicada Polychroa*, *Perty, Del. An. Art.* 176, pl. 35, f. 2.

*a, b.* Brazil. From Mr. Mornay's collection.

*c--c* Brazil.

#### 2. CARINETA VILLOSA.

*Carineta villosa*, *Amyot et Serr. Hist. Nat. Hém.* 483, 2.

*Cicada villosa*, *Oliv. Enc. Méth.* v. 752, 27. *Gmel. Ed. Syst. Nat.* ii. 3, 2096, 77. *Germ. Thon, Arch.* ii. 2, 104. *Silb. Rev. Ent.* ii. 74, 46, f. 21.

*Tettigonia villosa*, *Fabr. Sp. Ins.* ii. 320, 11. *Mant. Ins.* ii. 267, 16. *Ent. Syst.* iv. 21, 18. *Syst. Rhyn.* 38, 27.

*a.* South Africa. Presented by Dr. A. Smith.

*b, c.* South Africa. From Mr. Shuckard's collection.

*d, e.* South Africa.

#### 3. CARINETA PILOSA, Fem.

*Nervus transversus* 1us valdè curvus, valdè obliquus angulum obtusum ficiens, 2o ejus longitudine propior; 2us undatus, obliquus, angulum acutum ficiens, 1o brevior; 3us subundatus, subobliquus, angulum rectum ficiens; 4us subcurvus, subobliquus, angulum rectum ficiens, 3o longior.

Second marginal areolet full three-fourths of the length of the first: first cross-vein much curved, very slanting, forming an obtuse

angle, parted from the second by much less than its length; second waved, slanting, forming an acute angle, shorter than the first; third very slightly waved, slightly slanting, forming a right angle, closing the third discoidal areolet more or less before the fork of the fore-vein; fourth slightly curved, slightly slanting, forming a right angle, longer than the third; fifth curved, nearly upright, forming a hardly acute angle. Body bright tawny, partly green, hairy, especially in front of the head which is formed like that of a *Dun-dubia*: head much narrower than the fore-chest: face very convex: mouth dark tawny with a black tip, reaching the hind-hips: eyes prominent: feelers black: hind-scutcheon of the fore-chest broad, green, rounded but hardly widened near the base of each fore-wing: scutcheon of the middle-chest adorned with some indistinct darker marks; hind border very slightly excavated: abdomen pitchy, slightly obconical, longer than the chest: drums tawny, very small, far apart: legs dark tawny: claws black: fore-thighs armed with two stout tawny teeth: wings slightly tinged with tawny; veins green, tawny towards the tips. Length of the body 15 lines; of the wings 43 lines.

a. Venezuela. From Mr. Dyson's collection.

#### 4. CARINETA SCIRAS, Fem.

*Nervus transversus* *lus subcurvus*, valdè obliquus, angulum valdè obtusum ficiens, 2o triplò ejus longitudine divisus; 2us subcurvus, valdè obliquus, angulum valdè obtusum ficiens, 4o paultò longior; 3us subundatus, obliquus, angulum vix acutum ficiens; 4us subundatus, obliquus, angulum vix acutum ficiens, 3o paultò longior.

Second marginal areolet about three-fourths of the length of the first: first cross-vein slightly curved, very slanting, forming a very obtuse angle, parted from the second by thrice its length; second slightly curved, very slanting, forming a very obtuse angle, a little longer than the first; third slightly waved, slanting, forming a hardly acute angle; fourth very slightly waved, slanting, forming a hardly acute angle, a little longer than the third; fifth curved, slightly slanting, forming a slightly acute angle. In the insect described the fore vein of the second marginal areolet is divided and then reunited, and thus forms a little spindle-shaped areolet. Body green, hairy, short, broad: head nearly as broad as the fore-chest, clothed with long black hairs and with short tawny hairs; crown adorned with a broad irregular black band which incloses a tawny spot; face very slightly convex: mouth black, tawny at the base, reaching a little beyond the hind-hips: eyes not pro-

minent: feelers black: fore-chest clothed with short tawny hairs; scutcheon adorned with a black spot and with four black streaks which occupy the furrows on each side; hind-scutcheon broad, slightly widened, rounded and convex on each side, not excavated: scutcheon of the middle-chest clothed with whitish hairs, adorned with four obconical tawny stripes which inclose pitchy streaks, the inner pair not half the length of the outer pair; hind border slightly excavated: abdomen obconical, a little longer than the chest, slightly compressed towards the tip, tawny and clothed with tawny hairs, adorned with large black marks which are clothed with black hairs: legs green, clothed with rather long whitish hairs; hips, thighs and fore-shanks adorned with pitchy marks; shanks and hind-feet tawny; fore-feet and middle-feet black: wings colourless; fore border ferruginous; veins green, black towards the tips; cross-veins from the first to the fourth clouded with brown; a row of pale brown spots on the tips of the longitudinal veins of the marginal areolets. In the left wing of the insect described the lower vein of the first marginal areolet is divided for a short space and incloses a little narrow areolet. Length of the body 11 lines; of the wings 42 lines.

a. Venezuela. From Mr. Dyson's collection.

### 5. CARINETA TRICHIOSOMA, MRS.

*Nervus transversus* 1us subcurvus, obliquus, angulum obtusum fingens, 2o ferè triplo ejus longitudine divisis; 2us subcurvus, obliquus, angulum obtusum fingens, Vi longitudine; 3us subundatus, obliquus, angulum acutum fingens; 4us subundatus, valdè obliquus, angulum valdè obtusum fingens, 3o ferè duplò longior.

Second marginal areolet from two-thirds to three-fourths of the length of the first: first cross-vein slightly curved, slanting, forming an obtuse angle, parted from the second by nearly thrice its length; second slightly curved, slanting, forming an obtuse angle, as long as the first; third very slightly waved, slanting, forming an acute angle; fourth very slightly waved, very slanting, forming a very acute angle, nearly twice the length of the third; fifth slightly curved, upright, forming a slightly obtuse angle. Body tawny, very hairy, especially on the head which is very small, much narrower than the fore-chest, and has several black marks on the crown, the two largest of these are on the region of the eyelets; face prominent, very convex, its disk pitchy in front: mouth tawny, black towards the tip, reaching the middle-hips: eyes not prominent: feelers pitchy with tawny tips: scutcheon of the fore-chest narrower in front, with six black stripes which are adorned with tawny net-

work; the middle pair parallel; the other four oblique; the spaces between them adorned with black net-work; sides slightly convex; hind-scutcheon dark tawny, broad, extending beyond the scutcheon and having a black spot on each side: disk of the scutcheon of the middle-chest black, adorned with five green stripes; the middle one indistinct till near the hind border which is hardly excavated; the inner pair much curved outward, the outer pair oblique: abdomen ferruginous, obconical, not longer than the chest, adorned with three rows of black spots, greenish tawny on each side towards the base and beneath: opercula none; tymbals hoary with tawny ridges, between which there are tawny spots; drums extremely small: legs tawny, very hairy; thighs with pitchy stripes; two pitchy bands on each shank and foot; claws black; fore-thighs armed with three tawny teeth, two of these are large with pitchy tips, the third is very small: wings colourless, tawny and marked with black at the base; veins and fore borders dark towards the tips; a narrow black band on the fore border; cross-veins clouded with brown; flaps of the hind-wings colourless, tawny at the base; a brown dot on the tip of each longitudinal vein of the fourth, fifth and sixth marginal areolets; three or four pale yellow bands on the veins about the middle of the wings; fore borders of the flaps clouded with brown.

*Fem.*—Like the male but reddish tawny, and with ferruginous instead of black marks: abdomen ferruginous, longer than the chest, adorned with an interrupted paler stripe along the back and with a row of pitchy spots on each side: oviduct ferruginous: legs tawny, adorned with pitchy marks: fore border of the fore-wings bright red: veins red-dish towards the base.

Length of the body 11 lines; of the wings 30 lines.

*a, b.* South Africa. Presented by Dr. A. Smith.

*c.* ———?

## 6. CARINETA LEUCONEURA, Mas.

*Nervus transversus* 1us curvus, obliquus, angulum obtusum fingens, 2o plus ejus longitudine divisus; 2us subcurvus, obliquus, angulum obtusum fingens, 1o paullo brevior; 3us subcurvus, valde obliquus, angulum acutum fingens; 4us ferè rectus, suberectus, angulum obtusum fingens, 3i dimidio paullo longior.

Second marginal areolet a little shorter than the first: first cross-vein curved, slanting, forming an obtuse angle, parted from the second by much less than twice its length; second very slightly curved, slanting, forming an obtuse angle, a little shorter than the

first; third very slightly waved, very oblique, forming an acute angle; fourth nearly straight, almost upright, forming an obtuse angle, little more than half the length of the third; fifth very slightly curved, upright, forming a slightly acute angle. Body green: head and chest hairy: head very small, not more than half the breadth of the fore-chest, clothed with black hairs above, with white hairs beneath; crown black, with three greenish-tawny spots along the hind border; middle one conical, extending to the space between the eyelets; face pale yellow, prominent, very convex, adorned on each side in front with slender brown bands: mouth tawny with a black tip, reaching the middle-hips: feelers black: eyes not at all prominent: fore-chest much narrower in front than behind; scutcheon tinged with tawny on each side, adorned with eight black stripes, the middle pair parallel and very near together, the next pair forked towards the hind border, one of the forks reaching the middle pair, third and fourth pair oblique, the third occupying the furrows, the fourth on the borders; hind-scutcheon green, very slightly excavated on the hind border, extending near the base of the fore-wing far beyond the scutcheon: scutcheon of the middle-chest adorned with a long black curved stripe on each side, its disk adorned with four black stripes, the inner pair narrower in the middle and forming two imperfect triangles, the outer pair shorter, obconical; hind border not excavated: breast marked with black, clothed with long white hairs: abdomen obconical, tinged with tawny, hardly longer than the chest; opercula none; tymbals pitchy, tinged with gray; drums extremely small, the space between them equal to twice the breadth of each one: legs green; hips and thighs striped with black; knees black; shanks tinged with tawny towards the tips; claws tawny, black towards the tips; a black ring near the tip of each middle shank; tips of the fore shanks black: wings tawny; fore border green in one wing and luteous in the other of the specimen described: veins of the fore-wings clouded with brown, mostly white, but having some broad black bands here and there from the base to the middle; veins of the hind-wings luteous, here and there whitish, and more rarely slightly clouded with brown; fore-flaps whitish; hind-flaps tawny, whitish at the base and along the fore border. Length of the body 11 lines; of the wings 28 lines.

*a.* South Africa. Presented by G. F. Augas, Esq.

## 7. CARINETA BASALIS, Fem.

*Nervus transversus* 1us valdè curvus, valdè obliquus, angulum obtusum fingens, 2o plusquam ejus longitudine divisus; 2us curvus, obliquus, angulum acutum fingens, 1o paullo brevior; 3us vix undatus, obliquus, angulum subacutum fingens, 3o paullo longior.

Second marginal areolet as long as the first: first cross-vein much curved, very slanting, forming an obtuse angle, parted from the second by more than its length; second curved, slanting, forming an acute angle, a little shorter than the first; third very indistinctly waved, slanting, forming an acute angle; fourth curved, slanting, forming a very slightly acute angle, very little longer than the third; fifth curved, upright, forming a very slightly acute angle. Body tawny, hairy: head small; disk of the crown black; face very convex, rather prominent, adorned with two black spots: mouth tawny, black towards the tip, reaching the hind-hips: feelers black: fore-chest green, broader than the head, pale tawny in the middle part which has a black stripe ending? towards the hind border and sending forth two branches; furrows blackish; sides slightly convex, having a little notch in the space between the scutcheon and the hind-scutcheon which latter is rather broad: scutcheon of the mesothorax green, adorned with three very irregular black stripes: excavation on the hind border obsolete: abdomen slightly obconical, much narrower towards the tip, a little narrower but not longer than the chest, brown above and adorned with two broad pale tawny bands: legs tawny; tips of the claws black; fore-thighs armed with two small black teeth: wings and flaps colourless, dull green at the base: veins black, green towards the base; fore border of the fore-wing dull green, brown towards the tip; brand brown, distinct. Length of the body 9 lines; of the wings 27 lines.

a. Venezuela. From Mr. Dyson's collection.

## 8. CARINETA SUBMARGINATA, Fem.

*Nervus transversus* 1us curvus, obliquus, angulum obtusum fingens, 2o plus duplò ejus longitudine divisus; 2us subcurvus, ferè erectus, angulum vix obtusum fingens, 1o multò brevior; 3us vix undatus, obliquus, angulum subacutum fingens; 4us ferè rectus, subobliquus, angulum vix acutum fingens, 3i longitudine.

Second marginal areolet two-thirds of the length of the first: first cross-vein curved, slanting, forming an obtuse angle, parted



from the second by much more than twice its length; second slightly curved, nearly upright, forming a hardly obtuse angle, much shorter than the first; third indistinctly waved, slanting, forming a slightly acute angle; fourth nearly straight, slightly slanting, forming a hardly acute angle, as long as the third; fifth curved, upright, forming a nearly right angle. Body tawny, partly covered with white down: head much narrower than the fore-chest; region of the eyes black; face narrow, very convex, rather prominent: mouth tawny with a black tip reaching the hind-hips: eyes not prominent: feelers black, very slender except at the base where they are pitchy: fore-chest much narrower in front than behind; scutcheon adorned with a Y-shaped black mark, which by sending forth from its middle on each side an oblique black stripe to the hind border forms a reversed W; hind-scutcheon a little narrower in the middle than at the base of each fore-wing where it is rounded, thence it quickly decreases in breadth and ceases at half the length of each side: scutcheon of the middle-chest adorned with eight black stripes, these being united into two on each side include four obconical tawny marks, the inner pair of which are much shorter than the outer pair, but are succeeded by a large black spot which communicates with two black spots, the latter are on each side of the cross-ridge which is dark greenish-tawny: hind border hardly excavated: abdomen ferruginous, longer than the chest, partly pitchy on each side and beneath where it has two short obconical tawny stripes towards the base: oviduct ferruginous: legs tawny: thighs, shanks, and fore-hips adorned with pitchy stripes; feet pitchy; claws black, tawny at the base; fore-thighs armed with three red teeth which are pitchy at the base, one large, the second of moderate size, the third small: wings colourless; fore border green; veins pale green, black towards the tips, marked with black at the base and on the hind border, and on the middle vein of the flap; first and second cross-veins and the longitudinal vein between them clouded with brown; a row of pale brown spots on the tips of the longitudinal veins of the submarginal areolets; fore-membranes tawny; tips of the hind-wings brown; flaps tawny at the base, brown at the tips and along part of the hind border. Length of the body 10 lines; of the wings 28 lines.

a. ——— ?

## Genus 16. TETTIGARCTA.

*Tettigareta*, *White, Ann. Nat. Hist.* 1846, xvii. 331.

## 1. TETTIGARCTA TOMENTOSA.

*Tettigareta tomentosa*, *White, Ann. Nat. Hist.* 1846, xvii. 332.

*Eyre's Travels in Australia*, i. 413, pl. 4, f. 4.

*a, b.* New Holland. From the Rev. J. Wenham's collection.

## Genus 17. TETTIGOMYIA.

*Tettigomyia*, *Amyot et Serv. Hist. Nat. Hém.* 482, 375.

## 1. TETTIGOMYIA VESPIFORMIS.

*Tettigomyia vespiiformis*, *Amyot et Serv. Hist. Nat. Hém.* 482, 1.

*Cicada*, *Sc., Stoll, Cic.* 119, pl. 29, f. 173.

## 2. TETTIGOMYIA ANNULATA.

*Cicada annulata*, *Germ. Thon, Arch.* ii. 2, 78. *Silb. Rev. Ent.* ii. 73, 42.

*a—d.* South Africa. Presented by Dr. A. Smith.

## 3. TETTIGOMYIA SCURRA.

*Tettigomyia scurra*, *Amyot et Serv. Hist. Nat. Hém.* 482, 375.

*Cicada scurra*, *Germ. Thon, Arch.* ii. 2, 24. *Silb. Rev. Ent.* ii. 74, 45.

*a.* South Africa. Presented by Dr. A. Smith.

## 4. TETTIGOMYIA TABANIFORMIS.

*Cicada tabaniformis*, *Germ. Thon, Arch.*

*a, b, c.* Cape. From M. Dregé's collection.

## 5. TETTIGOMYIA LUTEA.

*Cicada lutea*, *Oliv. Enc. Méth.* v. 758, 59, pl. 113, f. 15. *Stoll*,  
*Cic.* 59, pl. 29, f. 173.

*a.* Cape. From M. Dregé's collection.

## 6. TETTIGOMYIA MUSCA.

*Cicada musca*, *Oliv. Enc. Méth.* v. 759, 60, pl. 113, f. 16. *Stoll*,  
*Cic.* 52, pl. 12, f. 60.

## 7. TETTIGOMYIA VESPIFORMIS.

*Tettigomyia vespiiformis*, *Amyot et Serr. Hist. Nat. Ins. Hém.* 482,  
 375, 1.

La Cigale jaune à anneaux bruns, *Stoll, Cig.* 119, pl. 29, f. 173.

*a—d.* South Africa. Presented by Dr. A. Smith.

## Genus 18. MOGANNIA.

*Mogannia*, *Amyot et Serr. Hist. Nat. Hém.* 467, 366.

## 1. MOGANNIA ILLUSTRATA.

*Mogannia illustrata*, *Amyot et Serr. Hist. Nat. Hém.* 467, 1.

*a.* North India. From Mr. Stevens' collection.

*b, c.* ——— ?

## 2. MOGANNIA NASALIS.

*Mogannia nasalis*, *White, Ann. Nat. Hist.* 1846, xvii. 332.

*a—l.* Hong Kong, China. Presented by J. Bowring, Esq.

3. *MOGANNIA INDICANS*, Mas et Fem.

*Nervus transversus* 1us rectus, ferè erectus, angulum vix obtusum fingens, 2o plus duplò ejus longitudine divisus; 2us subcurvus, erectus, angulum subobtusum fingens, 1o vix longior; 3us rectus, obliquus, angulum acutum fingens; 4us rectus, obliquus, angulum rectum fingens, 3o brevior.

Second marginal areolet full two-thirds of the length of the first: first cross-vein straight, nearly upright, forming a hardly obtuse angle, parted from the second by much more than twice its length; second very slightly curved, upright, forming a slightly obtuse angle, hardly longer than the first: third straight, slanting, forming an acute angle; fourth straight, slanting, forming a right angle, shorter than the third; fifth slightly curved, slightly slanting, forming a slightly acute angle.

*Male*.—Body bright red: head much narrower than the chest; face pointed, clothed with black hairs: mouth black, reaching the middle hips: feelers yellow, black at the base: eyes rather prominent: a very large dark ferruginous spot on each side of the fore-chest; scutcheon of the middle-chest adorned with a broad, obconical, oblique, black stripe on each side, whose border is black: breast black: abdomen nearly elliptical, longer and broader than the thorax, blackish towards the base; a black horn on the tip: legs black, hairy; hips and four hinder thighs marked with red: wings colourless, tawny at the base; fore-wings adorned with a very broad brown band which includes a very irregular yellow band; veins yellow, tawny at the base.

*Fem*.—Body nearly all black: a colourless spot on the base of the brown band of the fore-wing.

Length of the body 6—8 lines; of the wings 14—17 lines.

*Var. β. Mas.* Body very dark red.

*a, b. China.* Presented by G. T. Lay, Esq.

*c. Hong Kong, China.* Presented by J. C. Bowring, Esq.

4. *MOGANNIA IGNIFERA*, Mas.

*Nervus transversus* 1us ferè rectus, suberectus, angulum subobtusum fingens, 2o ferè triplò ejus longitudine divisus; 2us subcurvus, subobliquus, angulum obtusum fingens, 1o vix longior; 3us rectus, obliquus, angulum acutum fingens; 4us subcurvus, subobliquus, angulum rectum fingens, 3o vix brevior.

Second marginal areolet full three-fourths of the length of the first: first cross-vein almost straight, nearly upright, forming a

slightly obtuse angle, parted from the second by nearly thrice its length; second very slightly curved, slightly slanting, forming an obtuse angle, hardly longer than the first; third straight, slanting, forming an acute angle; fourth very slightly curved, slightly slanting, forming a right angle, very little shorter than the third; fifth slightly curved, slightly slanting, forming a slightly obtuse angle. Body dark red, adorned with yellow down, which forms a broad stripe along the back of the abdomen: mouth ferruginous, with a pitchy tip: feelers yellow, pitchy at the base: furrows of the fore-chest pitchy: legs red; claws tawny, with black tips: wings colourless, bright red at the base and along half the length of the fore border; fore-wings bright tawny for near half the length; a brown band adjoins the tawny hue, and proceeds from the fore border to the middle of the disk where it almost ceases; veins yellow, reddish towards the base. Length of the body 8 lines; of the wings 17 lines.

a. Java. From Mr. Argent's collection.

#### 5. *MOGANNIA AVICULA*, Mas.

*Nervus transversus* *lus rectus*, *ferè erectus*, *angulum subobtusum* *figens*; 1. *plus duplè ejus longitudine divisus*; 2. *us rix curvus*, *ferè erectus*, *angulum obtusum figens*, 1. *o longior*; 3. *us rectus*, *obliquus*, *angulum rectum figens*; 4. *us rectus*, *obliquus*, *angulum acutum figens*, 3. *o longior*.

Second marginal areolet full three-fourths of the length of the first: first cross-vein straight, nearly upright, forming a slightly obtuse angle, parted from the second by more than twice its length; second very slightly curved, nearly upright, forming an obtuse angle, longer than the first; third straight, slanting, forming a right angle; fourth straight, slanting, forming an acute angle, longer than the third; fifth straight, nearly upright, forming a right angle. Body dark red, clothed with pale tawny down: head pale red, much narrower than the fore-chest; face longer than broad; mouth dark tawny, with a black tip: feelers yellow, black at the base: eyes rather prominent: a pale red stripe extending from the head to the tip of the abdomen: legs pitchy; shanks dark red; claws tawny, with black tips: wings colourless, bright red at the base; fore-wings brown and mottled with tawny for half the length from the base; veins yellow; veins of the hind-wings tawny, red towards the base. Length of the body 6—7 lines; of the wings 16 lines.

a. Philippine Islands. From Mr. Cuning's collection.

b. Java. From Mr. Argent's collection.

## Genus 19. HUECHYS.

Huechys, *Amyot et Serv. Hist. Nat. Hém.* 46, 16.

## 1. HUECHYS SANGUINEA.

Huechys sanguinea, *Amyot et Serv. Hist. Nat. Hém.* 465, 1.

Cicada sanguinea, *Deg. Ins.* iii. 221, 18, pl. 33, f. 17. *Gmel. Ed. Syst. Nat.* i. 3, 2098, 81.

Tettigonia sanguinolenta, *Fabr. Syst. Ent.* 681, 15. *Sp. Ins.* ii. 321, 19. *Mant. Ins.* ii. 267, 24. *Ent. Syst.* iv. 25, 30. *Syst. Rhyn.* 42, 46.

Cicada sanguinolenta, *Oliv. Enc.* v. 756, 45. *Germ. Thon, Arch.* ii. 2, 25. *Silb. Rev. Ent.* ii. 75, 50. *Blanch. Hist. Nat. Ins.* iii. 165, 6. *Guér. Mag. Zool.* 1838, 76, 2.

a, b. Hong Kong, China. Presented by J. C. Bowring, Esq.

c. China. Presented by F. Walker, Esq.

d. Java. Presented by F. Walker, Esq.

e, f. China.

## 2. HUECHYS PHILEMATA.

Huechys philemata, *Amyot et Serv. Hist. Nat. Hém.* 465, 2.

Tettigonia philemata, *Fabr. Syst. Rhyn.* 42, 47. *Stoll, Cic.* 53, pl. 13, f. 62.

Cicada philemata, *Germ. Thon, Arch.* ii. 2, 26. *Silb. Rev.* ii. 75, 52. *Lurm. Handb. Ent.* ii. 1, 180, 2.

a. Philippine Islands. Presented by J. C. Bowring, Esq.

b, c. Philippine Islands. From Mr. Cuming's collection.

d. East India. From Archdeacon Clerk's collection.

e. North Bengal. From Miss Campbell's collection.

f. Silhet. From the Rev. J. Stainforth's collection.

g—i. Silhet. From Mr. Sowerby's collection.

## 3. HUECHYS INCARNATA.

Huechys incarnata, *Amyot et Serv. Hist. Nat. Hém.* 465, 3.

Cicada incarnata, *Germ. Silb. Rev. Ent.* ii. 75, 51.

Cicada sanguinolenta, *Brull. Hist. Nat. Hém.* ii. pl. 5, f. 2. *Guér. Mag. Zool.* 1838, 77, 3.

Cicada Germari, *Guérin, Voy. de la Favorite, Mag. de Zool.* 1838, Cl. 9, 784, pl. 237, f. 2.

a. Java. Presented by F. Walker, Esq.

b. Java. From Mr. Argent's collection.

c. Java.

## 4. HUECHYS SPLENDIDULA.

*Tettigonia splendidula*, *Fabr. Syst. Ent.* 681. *Sp. Ins.* ii. 321, 20.  
*Mant. Ins.* ii. 267, 25. *Ent. Syst.* iv. 25, 33. *Syst. Rhyn.*  
 42, 49.

*Cicada splendidula*, *Gmel. Ed. Syst. Nat.* i. 3, 2098, 83. *Oliv. Enc. Méth.* v. 756, 47. *Germ. Thon, Arch.* ii. 2, 45, 102. *Guér. Mag. Zool.* 1838, 79, 9.

- a. East India. Presented by F. Walker, Esq.  
 b, c. North India. From Mr. Warwick's collection.  
 d. Java. From Mr. Argent's collection.  
 e. East India. From Archdeacon Clerk's collection.  
 f—h. Silhet. From the Rev. J. Stainforth's collection.

## 5. HUECHYS TESTACEA.

*Tettigonia testacea*, *Fabr. Mant. Ins.* ii. 267, 23. *Ent. Syst.* iv. 24, 29. *Syst. Rhyn.* 42, 45. *Stoll, Cic.* 41, pl. 8, f. 41.

*Cicada testacea*, *Oliv. Enc. v.* 756, 43, pl. 113, f. 5. *Gmel. Ed. Syst. Nat.* i. 3, 2098, 82. *Germ. Thon, Arch.* ii. 2, 3, 27. *Guér. Mag. Zool.* 1838, 78, 6.

## 6. HUECHYS CROCEA.

*Cicada crocea*, *Guér. Voy. Favorite, Mag. Zool.* 1838, *Ins.* 79, 8, pl. 237, f. 3. *Voy. Coquille, Zool.* 2, 182.

## 7. HUECHYS TRABEATA.

*Cicada trabeata*, *Germ. Thon, Arch.* 2, fasc. 2, 3, 28. *Guér. Mag. Zool.* 1838, 78, 7.

## 8. HUECHYS PHOENICURA.

*Cicada phœnicura*, *Germ. Silb. Rev. Ent.* ii. 76, 53. *Guér. Icon. Regn. Anim.* 1838, 78, 5.

## 9. HUECHYS VIDUA.

*Huechys vidua*, *White, Ann. Nat. Hist.* 1846, xvii. 332.

- a. New Holland. Presented by the Entomological Club.  
 b, c. ——— ?

10. *HUECHYS OCTONOTATA*.

*Cicada octonotata*, *Westw. Arc. Ent.* 33, pl. 57, f. 2.

*a.* Silhet. From the Rev. J. Stainforth's collection.

Genus 20. *GEANA*.

*Gæana*, *Amyot et Serr. Hist. Nat. Hém.* 463, 362.

*Group 1.*

First cross-vein slightly waved, very slanting, forming a very acute angle, parted from the second by much less than twice its length; second slightly waved, slanting, forming an extremely obtuse angle, a little longer than the first, third very slightly waved, slanting, forming an acute angle; fourth nearly straight, slanting, forming a slightly acute angle, hardly longer than the third; fifth nearly straight, upright, forming a very slightly acute or obtuse angle.

1. *GEANA MACULATA*.

*Gæana maculata*, *Amyot et Serr. Hist. Nat. Hém.* 461, 1.

*Tettigonia maculata*, *Fabr. Syst. Ent. App.* 831. *Sp. Ins.* ii. 319, 8. *Mant. Ins.* ii. 266, 12. *Ent. Syst.* iv. 20, 12. *Syst. Rhyn.* 37, 18.

*Cicada maculata*, *Drury, Ins.* ii. 69, pl. 37, f. 1. *Gmel. Ed. Syst. Nat.* i. 3, 2100, 94. *Oliv. Enc.* v. 750, 20, pl. 112, f. 1. *Germa. Thon, Arch.* ii. 2, 12. *Silb. Rev. Ent.* ii. 74, 18.

*a, b.* China. Presented by J. C. Bowring, Esq.

*c—i.* China.

2. *GEANA CONSORS*.

*Gæana consors*, *White, Proc. Zool. Soc.* 1850.

*Group 2.*

First cross-vein curved, very slightly oblique, forming a hardly obtuse angle, parted from the second by twice its length; second



much curved, nearly upright, forming a slightly acute angle, longer than the first; third very slightly waved, very oblique, forming a very acute angle; fourth very slightly curved, oblique, forming a slightly acute angle, longer than the third; fifth slightly curved, upright, forming a hardly acute angle.

### 3. GÆANA SULPHUREA.

*Cicada sulphurea*, *Hope, Royle's Illustr. Himal. Mount. Pt. 9*, pl. 10, f. 2. *Introd.* liv.

*Cicada pulchella*, *Westw. Arc. Ent.* 33, pl. 57, f. 1.

*a, b.* Nepal. From the Hardwicke bequest.

*c.* North India. From Mr. Warwick's collection.

*d, e.* North India. From Mr. L. James's collection.

### Group 3.

First cross-vein much curved, slightly slanting, forming a hardly obtuse angle, parted from the second by full four times its length; second very slightly waved, extremely slanting, forming an extremely obtuse angle, very much longer than the first; third deeply waved, slanting, forming an acute angle; fourth very slightly curved, upright, forming a hardly obtuse angle, a little shorter than the third; fifth slightly curved, a little slanting, forming a hardly acute angle.

### 4. GÆANA CONSOBRINA.

*Gæana consobrina*, *White, Proc. Zool. Soc.* 1850.

## Genus 21. CYSTOSOMA.

*Cystosoma*, *Westw. Arc. Ent.* 1842, 92.

### 1. CYSTOSOMA SAUNDERSII.

*Cystosoma Saundersii*, *Westw. Arc. Ent.* 1842, 92, pl. 24, f. 1.  
*Amyot et Serv. Hist. Nat. Ins. Hém.* 460, 1. *Lucas, Ann. Soc. Ent. Fr. 2me Série*, iv. *Bull. Ent.* 101.

*a, b.* New Holland. From Mr. Argent's collection.

## Genus 22. HEMIDICTYA.

Hemidictya, *Burm. Handb. Ent.* ii. 1, 178, 1.

## 1. HEMIDICTYA FRONDOSA.

Hemidictya frondosa, *Burm. Handb. Ent.* ii. 1, 178, 1. *Westw. Arc. Ent.* 1842, pl. 24, f. 3. *Amoyot et Serv. Hist. Nat. Ins. Hém.* 461, 1.

## ADDENDUM.

### 2. TETTIGADES COMPACTA, FCH.

*Nervus transversus 1us rectus, valdè obliquus, angulum perobtusum fingens, 2o ejus longitudine divisus; 2us subcurvus, valdè obliquus, angulum perobtusum fingens, 1o paultò brevior; 3us incurvus, ferè erectus, angulum obtusum fingens; 4us excurvus, erectus, angulum obtusum fingens, 3i longitudine.*

Second marginal areolet longer than the first: first cross-vein straight, very slanting, forming an extremely obtuse angle, parted from the second by its length; second very slightly curved, very slanting, forming an extremely obtuse angle, a little shorter than the first; third curved inward, nearly upright, forming an obtuse angle; fourth curved outward, upright, forming an obtuse angle, as long as the third; fifth very slightly curved, slightly slanting, forming an acute angle. Body black, short, broad, clothed with tawny hairs: head narrower than the fore-chest; face notched in front, adorned with some tawny dots; mouth tawny, with a black tip, reaching the middle lips: feelers black, eyes prominent: hind border and sides of the fore-chest tawny; sides slightly angular: hind border of the middle chest tawny, very slightly excavated: abdomen black, obconical, a little narrower and longer than the chest; a tawny stripe on each side beneath: legs black, clothed with tawny hairs; thighs tawny beneath; four posterior shanks tawny, with black tips; fore-thighs armed with two tawny teeth of moderate size: wings colourless; veins tawny, clouded in the disk with pale brown; most of the cross-veins brown; fore-flaps luteous. Length of the body 8 lines; of the wings 20 lines.

a. West Coast of America. Presented by Captain Kellett and Lieutenant Wood.

## SYNONYMS OF THE GENERA.

### Order I. CICADINA.

Auchenorrhynchi, *Duméril, Amyot et Serville*.  
Cicadariae, *Latr.*

### Fam. I. STRIDULANTIA.

Stridulantes, *Latr.*, *Amyot et Serville*.

Cicadidae, *Westw.*

Cicadae Hemipterae (Genera Platycleura, Oxypleura, Huechys)  
*Burm. Handb. Ent.* ii. 179, 180.

Cicadae Microcephalae (Genera Gaana, Carineta, Tettigomyia)  
*Burm. Handb. Ent.* ii. 180.

Cicadae Macrocephalae (Genus Cicada), *Burm. Handb. Ent.* ii. 181.

Cicadae Trachelophyllae (Genus Zammara), *Burm. Handb. Ent.* ii  
182.

Cicadae Megistae (Genus Fidicina), *Burm. Handb. Ent.* ii. 183.

Stridulantes Reticelli Polynaeurides (Genera Polyneura, Cystosoma,  
Hemydictya), *Amyot et Serville, Hist. Nat. Hém.* 459, 460.

Stridulantes Octicelli Tosenides (Genera Tacua, Tosenia, Pycna,  
Gaana, Huechys, Platycleura, Hemisciera, Mogannia), *Amyot  
et Serville, Hist. Nat. Hém.* 461.

Stridulantes Octicelli Cicadides (Genera Zammara, Oxypleura,  
Tettigades, Cyclochila, Dundubia, Thopha, Fidicina, Cicada,  
Tettigomyia, Carineta), *Amyot et Serville, Hist. Nat. Hém.*  
468.

## Genus 1. POLYNEURA

This genus resembles the Fulgorina in the neuration of the forewings, and with Platycleura, Oxypleura and Zammaria, forms a group of Stridulantiæ distinguished by the lateral development of the prothorax, and in general by the coloured wings.

## Genus 2. PYCNA.

Cicada, *Brullé*.

## Genus 3. PLATYPLEURA.

Cicada, *Lin.* *Sulzer*, *Petiver*, *Olivier*, *Gmelin*, *Deg.* *Vanophius*,  
*Drury*, *Germar*, *Burmeister*, *Blanchard*.  
Scarabæus, *Seba*.  
Tettigonia, *Fabr*.

## Genus 4. OXYPLEURA.

Tettigonia, *Fabr*.  
Cicada, *Olivier*, *Gmelin*, *Germar*.

## Genus 5. ZAMMARA.

Tettigonia, *Fabr*.  
Cicada, *Palisot-Beauvois*, *Germar*, *Perty*, *Burmeister*, *Blanchard*.

## Genus 6. THOPHA.

Tettigonia, *Fabr*.  
Cicada, *Germar*, *Guérin*.

## Genus 7. CYCLOCHILA.

Tettigonia, *Donovan*, *Leach*.  
Cicada, *Germar*, *Burmeister*.

## Genus 8. TACUA.

Tettigonia, *Illiger*, *Fabr*.  
Cicada, *Donovan*, *Blanchard*.

## Genus 9. TOSENA.

*Tettigonia*, *Fabr.*

*Cicada*, *Olivier*, *Germar*, *Blanchard*.

This genus has a spine on each side of the fore-chest like that of *Dundubia*, to which it is nearly allied, but is distinguished by its coloured wings, and by the well-defined band of transverse veins on the fore-wings.

## Genus 10. DUNDUBIA.

*Tettigonia*, *Fabr.*

*Cicada*, *Olivier*, *Gmelin*, *Germar*, *Boisduval*, *Westwood*, *Signoret*.

The opercula of the male in this genus are very variable as to size; in some species they are excessively developed and as long as the abdomen; in others they are very small or of moderate length.

## Genus 11. FIDICINA.

*Cicada*, *Linnaeus*, *Degeer*, *Olivier*, *Gmelin*, *Houttuin*, *Lamarck*, *Germar*, *Say*, *Harris*, *Burmeister*, *Blanchard*, *Signoret*, *Carreno*.

*Tettigonia*, *Fabr.*

*Cicada* has three jointed tarsi; in *Fidicina* the tarsi are said to have but two joints, the third being very minute or almost obsolete, but the genera are hardly distinct, and *Fidicina* is most closely allied to the larger species of *Cicada*. The variation of structure in the opercula of the male is one of the specific characters.

## Genus 12. CICADA.

*Tettigonia*, *Fabr.* *Panzer*, *Leach*.

*Tibicen* (Ex. *C. hamatodes*), *Latr.*, *Brullé*.

*Hemisciera* (Ex. *C. capensis*), *Amyot et Serville*.

The variations in this genus may be gathered into fifty groups or upwards; but these, although so numerous, would be indefinite as to their limits, would hardly afford sectional characters, and would not comprise very many species; and the divisions are therefore deferred until they can be more fully established.

## Genus 15. CARINETA.

*Tettigonia*, *Fabr.*

*Cicada*, *Olivier*, *Gmelin*, *Germar*, *Perty*, *Burmeister*, *Guérin*, *Blanchard*.

## Genus 17. TETTIGOMYIA.

*Cicada*, *Olivier*, *Germar*.

## Genus 19. HUECHYS.

*Tettigonia*, *Fabr*.

*Cicada*, *Deg.* *Olivier*, *Gmelin*, *Germar*, *Burmester*, *Guérin*, *Blanchard*, *Brullé*, *Westwood*.

## Genus 20. GÆANA.

*Tettigonia*, *Fabr*.

*Cicada*, *Drury*, *Olivier*, *Gmelin*, *Germar*, *Hope*, *Westwood*.

# LIST

## HOMOPTEROUS INSECTS.

### Order I. CICADINA.

#### Fam. II. FULGORINA.

Fulgorellæ, *Latr. Germar, Spinola, Ann. Soc. Ent. Fr.* viii. 202.  
Subtericornes, *Amyot et Serville, Hist. Nat. Hém.* 483.

*Note.*—The wing-veins of the Stridulantia vary in each species. in this family they vary in each individual, and differ in proportion to their multiplying, and have an apparently endless variety of combinations.

#### Sub-Fam. I. FULGORELLÆ.

Fulgorellæ, *Spin. Ann. Soc. Ent. Fr.* viii. 202.  
Fulgorina, II, *Burm. Handb. Ent.* ii. 14, 4.  
Cavigeni, *Amyot et Serr. Hist. Nat. Ins. Hém.* 485.

#### Tribe I. FULGORITES.

Fulgorites, *Spinola, Ann. Soc. Ent.* viii. 202.  
Nudimargines, *Amyot et Serr. Hist. Nat. Hém.* 487.



## Sub-Tribe 1. FULGOROIDES.

Fulgoroïdes, *Spinola, Ann. Soc. Ent.* viii. 202, 206.

Fulgorides, *Amyot et Serrille* (ad partem).

Fulgoridæ, *Schaum* (ad partem.)

## Genus 1. FULGORA.

Fulgora, *Linn. Spinola, Ann. Soc. Ent.* viii.

Laternaria, *Linn.*

Cæcada, *Degeer.*

Cucujus, *Grew.*

Musca, *Vincent.*

## 1. FULGORA LATERNARIA.

Fulgora laternaria, *Linn. Syst. Nat.* i. 2, 703, 1. *Gron. Zooph.* 668. *Gmel. Ed. Syst. Nat.* i. 4, 2089, 1. *Merian, Surin.* 40, pl. 49. *Roes. Ins. Belust.* ii. *Locust.* pl. 28, 29. *Reaum. Ins.* v. pl. 20, f. 6, 7. *Dege. Ins.* iii. 195, 1. *Seba, Mus.* 4, pl. 77, f. 3, 4. *Fabr. Syst. Ent.* 673, 1. *Sp. Ins.* ii. 313, 1. *Mant. Ins.* ii. 260, 1. *Ent. Syst.* iv. 1, 1. *Syst. Rhyn.* 1, 1. *Oliv. Enc. Méth.* vi. 563, 567, 1, pl. 108, f. 15. *Stoll, Cic.* 13, pl. 1, f. 1. *Tign. Hist. Nat. Ins.* iv. 106, pl. 2, f. 4. *Pal. Beaur. Ins.* 67. *Hém.* pl. 194, f. 1. *Germ. Thon, Archiv.* ii. 2, 46. *Mag. Ent.* iii. 186, 1. *Burm. Handb. Ent.* ii. 1, 169, 5. *Gen. Ins.* i. 8. *Rhyn. Cic. Fulg.* i. *Latr. Règn. Anim.* v. 245. *Lam. Hist. Nat. An. sans Vert.* iii. 482, 1. *Guér. Mag. Zool.* pl. 174, f. 1, 2. *Spin. Ann. Soc. Ent. Fr.* viii. 213, 1. *Brullé. Hist. Nat. Ins. Hém.* pl. 4. *Westw. Trans. Linn. Soc.* xviii. 137. *Duncan's Nat. Libr.* i. 279, pl. 22, f. 1. *Blanch. Hist. Nat. Ins.* iii. 168, 1. *Hém.* pl. 11. *Amyot et Serr. Hist. Nat. Hém.* 490, 1.

Laternaria phosphorea, *Linn. Mus. Lud. Ultr.* 152, 1.

Cucujus Peruvianus, *Grew, Mus.* 158, pl. 13.

Musca laternaria, *Vincent, Mus.* 9

Cicada laternaria, *Dege. Ins.* iii. 195, 1.

Var. ? Fulgora Castresii, *Guér. Mag. Zool.* pl. 173, 174, f. 3, 4. Mexico. *Westw. Trans. Linn. Soc.* xviii. 138, 2. *Spin. Ann. Soc. Ent. Fr.* viii. 214, 3. *Burm. Gen. Ins.* i. 8. *Rhyn. Cic. Fulg.* 4.

Var. ? Fulgora lucifera, *Germ. Mag. Ent.* iv. 100. *Thon, Arch.* ii. 46. *Brullé, Hist. Nat. Ins.* x. pl. 4, f. b. ? *Westw. Trans. Linn. Soc.* xviii. 138, 3. *Burm. Gen. Ins.* i. 8. *Rhyn. Cic. Fulg.* 5, pl. f. 1.

Var.? *Fulgora Servillei*, *Spin. Ann. Soc. Ent. Fr.* viii. 214, 2.  
*Burm. Gen.* i. 8. *Rhyn. Cic. Fulg.* 3.

Var.? *Fulgora lampetis*, *Burm. Gen. Ins.* i. 8. *Rhyn. Cic. Fulg.* 2.

*a.* Brazil. From Mr. Mornay's collection.

*b.* Brazil. From Mr. Stevens' collection.

*c, d.* Brazil.

*e.* Venezuela. From Mr. Pamplin's collection.

*f.* Honduras. From Mr. Dyson's collection.

*g.* Mexico. From Mr. Argent's collection.

## Genus 2. PHRICTUS.

*Phrictus*, *Spinola*, *Ann. Soc. Ent. Fr.* viii. 216.

*Fulgora*, *Linn.*, *Fabr.*, *Lindenb.*, *Seba*, *Olivier*, *Gmelin*, *Drury*,  
*Donovan*, *Germar*, *Burmeister*, *Westwood*, *Blanchard*.

*Pyrops*, *Spinola*, *Schaum* (ad partem).

### Group I.<sup>1</sup>

Protuberance of the head rather short, armed with spines, ending in a knob which consists of three large spines.

#### 1. PHRICTUS DIADEMA.

*Phrictus diadema*, *Spin. An. Soc. Ent. Fr.* viii. 219. *Amyot et Serr. Hist. Nat. Hém.* 495, 1.

*Fulgora diadema*, *Linn. Syst. Nat.* i. 2, 703, 2. *Gmel. Ed. Syst. Nat.* i. 4, 2089, 2. *Lindenb. Naturf.* xiii. 20, pl. 3, f. 3. *Fabr. Syst. Ent.* 673, 2. *Mant. Ins.* ii. 260, 3. *Sp. Ins.* ii. 313, 3. *Ent. Syst.* iv. 2, 3. *Syst. Rhyn.* 2, 3. *Oliv. Enc.* vi. 567, 3, pl. 109, f. 2. *Stoll, Cic.* 31, pl. 5, f. 22. *Seba, Mus.* iv. pl. 77, f. 7, 8. *Donov. Nat. Repos.* v. 145. *Germ. Thon, Arch.* ii. 2, 46, 3. *Burm. Handb. Ent.* 1, 169, 4. *Blanch. Hist. Nat. Ins.* iii. 169, 3. *Westw. Drury, Ins.* 2 edit. 78. *Trans Linn. Soc.* xviii. 147, 24.

*F. armata*, *Drury, Ins.* iii. 76, pl. 50, f. 4.

*c, b.* From Mr. Mornay's collection.

*c—e.* From Mr. Stevens' collection.

Var. Fore-wings red, not spotted towards the base, adorned with a fawn-coloured, entire, waved and slightly oblique band which has a whitish tinge; along its inner side there is a slender interrupted red and brown stripe, and from thence to the tip the cross-veins are more numerous, more regular and more distinct than on the rest of the wing: hind-wings red with white spots, black with white spots towards the tip, brown along the hind border; the outer border of the red hue is much interrupted, and forms more or less distinct spots.

*f.* Honduras. From Mr. Dyson's collection.

## 2. PHRICTUS ANNULARIS.

*Fulgora annularis*, *Oliv. Enc. Méth.* vi. 568, 6. *Stoll, Cic.* 57, pl. 14, f. 69. *Westw. Trans. Linn. Soc.* xviii. 140, 9.  
*Flata annularis*, *Germ. Thon, Arch.* ii. 2, 47, 3.  
*Pyrops annularis*, *Spin. Ann. Soc. Ent. Fr.* viii. 240, 8.  
 Surinam.

## Group 2.

Protuberance of the head armed with teeth on each side like a saw, and decreasing in breadth from the base to the tip.

## 3. PHRICTUS SERRATUS.

*Fulgora serrata*, *Fabr. Sp. Ins.* ii. 313, 2. *Mant. Ins.* ii. 260, 2. *Ent. Syst.* iv. 2, 2. *Syst. Rhyn.* 2, 2. *Seba, Mus.* iv. pl. 77, f. 5, 6. *Lindenberg, Naturf.* xiii. 19, pl. 3, f. 1, 2. *Oliv. Enc. Méth.* vi. 563, 567, 2, pl. 109, f. 1. *Stoll, Cic.* 170, pl. 29, f. 170. *Seba, Mus.* 4, pl. 77, f. 5, 6. *Gmel. Ed. Syst. Nat.* i. 4, 2089, 10. *Germ. Thon, Arch.* ii. 2, f. 46, 4. *Burm. Handb. Ent.* ii. 1, 169, 3. *Westw. Trans. Linn. Soc.* xviii. 147, 23.  
*Pyrops serratus*, *Spin. Ann. Soc. Ent. Fr.* viii. 235, 2.

*a.* Brazil. From Mr. Mornay's collection.

## Genus 3. HOTINUS.

*Hotinus*, *Amyot et Serr. Hist. Nat. Ins. Hém.* 490, 378.

*Laternaria*, *Linn.*

*Fulgora*, *Linn. Fabr. Degeer, Sulzer, Gmelin, Tign. Olivier, Palisot-Beauvois, Donovan, Kirby, Burmeister, Westwood, Blanchard, Guérin.*

*Flata*, *Germar.*

*Pyrops*, *Spinola, Schaum.*

## 1. HOTINUS CANDELARIUS.

- Hotinus candelarius*, *Amyot et Serv. Hist. Nat. Hém.* 490, 1.  
*Laternaria candelaria*, *Linn. Mus. Lud. Utr.* 153, 2. *Act. Stockh.* 1746, 63, pl. 1, 1, 5, 6.  
*Fulgoria candelaria*, *Linn. Syst. Nat.* i. 2, 70, 33. *Fabr. Syst. Ent.* 673, 3. *Sp. Ins.* ii. 313, 4. *Mant. Ins.* ii. 260, 4. *Ent. Syst.* iv. 2, 4. *Syst. Rhyn.* 2, 4. *Oliv. Enc.* vi. 593, 568, 4, pl. 109, f. 3. *Stoll, Cic.* 44, pl. 10, f. 46. *Roesel, Ins. Belust.* ii. *Locust.* 189, pl. 30. *Don. Ins. China*, pl. 14. *Deg. Ins.* iii. 197, 2. *Édwc. Ar.* pl. 120. *Sulz. Ins.* pl. 10, f. 62. *Geel. Ed. Syst. Nat.* i. 4, 2089, 3. *Tign. Hist. Nat. Ins.* iv. 107, pl. 2, f. 1. *Pal. Beauv. Ins.* 168. *Hém.* pl. 19, f. 2. *Duméril, Cons. Gen. Ins.* pl. 38, f. 4. *Burm. Handb. Ent.* ii. 1, 168, 1. *Westw. Trans. Linn. Soc.* xviii. 138, 4. *Duncan's Nat. Libr.* i. 283, pl. 23, f. 1. *Blanch. Hist. Nat. Ins.* iii. 169, 8. *Hém.* pl. 12, f. 1.  
*Flata candelaria*, *Germ. Mant. Ent.* iii. 189, 1. *Thon, Arch.* ii. 2. 46, 1.  
*Pyrops candelaria*, *Spin. Ann. Soc. Ent. Fr.* viii. 233, 1.  
*a—d.* Hong Kong, China. Presented by J. C. Bowring, Esq.  
*e—l.* China.  
*m.* Silhet. From the Rev. J. Stainforth's collection.

## 2. HOTINUS CYANIROSTRIS.

- Fulgora cyanirostris*, *Guérin, Ann. Soc. Ent. Fr. 2me Série*, iii. *Bull. Ent.* 96.  
 Java.

## 3. HOTINUS VIRIDIROSTRIS, Fern.

- Pyrops viridirostris*, *Westw. Orient. Ent.* pl. f. 4.  
*Luteus, caput viride, pedes nigri, femora basi lutea, alæ anticae virides luteo basi fasciatæ apice maculatæ, alæ posticæ luteæ apice nigrae.*

Nearly allied to *H. candelarius*, from which it is chiefly distinguished by the green protuberance of its head. Body luteous: head green; epistoma luteous: mouth dark brown with a black tip: a black slightly oblique stripe on each side of the shield; scutcheon having on each side two black spots, between which there is a spindle-shaped black stripe: fore borders of the abdominal segments brown beneath: legs black; thighs brown, luteous at the base; hind-thighs luteous: fore-wings green, adorned with two luteous

bands near the base, and near the tip with eleven or thirteen luteous spots, a few of the latter being sometimes confluent; there is a luteous spot on the fore border between the first and the second band, and the latter has towards the hind border a fork which is sometimes disjoined; veins green, luteous on the spots and bands: hind-wings luteous with black tips. Length of the body 16 lines; of the wings 27 lines.

a. Assam. From Mr. Warwick's collection.

#### 4. HOTINUS SPINOLÆ.

Fulgora Spinolæ, *Westw. Ann. Nat. Hist. April*, 1842, ix. 118.  
*Orient. Ent.* pl. 36, f. 1.

a, b. Silhet. From the Rev. J. Stainforth's collection.

c. Silhet. From Mr. Sowerby's collection.

d. Silhet. From Mr. Leadbeater's collection.

#### 5. HOTINUS LATHBURIÆ.

Fulgora Lathburii, *Kirby, Trans. Linn. Soc.* xii. 450, 97. *Guér. Icon. Règn. Anim. Ins.* pl. 58; f. 2. *Westw. Trans. Linn. Soc.* xviii. 139, 5.

Flata Lathburii, *Germ. Thon, Arch.* ii. 2, 46.

a—c. Hong Kong, China. Presented by J. C. Bowring, Esq.

d. Silhet. From Mr. Sowerby's collection.

#### 6. HOTINUS DELESSERTII.

Fulgora Delessertii, *Guérin, Rev. Zool.* 1839, 183. *Delessert, Souv. Voy. Inde.* 66, pl. 16, f. 2.

a. Malabar Coast. Presented by T. Ward, Esq.

#### 7. HOTINUS MACULATUS.

Fulgora maculata, *Oliv. Enc. Méth.* vi. 563, 568, 5. *Stoll, Cic.* 98, pl. 26, f. 143. *Earm. Handb. Ent.* ii. 1, 169. *Westw. Trans. Linn. Soc.* xviii. 140, 8. *Duncan's Nat. Libr.* i. 284, pl. 23, f. 2.

Flata maculata, *Germ. Thon, Arch.* ii. 2, 46.

a. Ceylon. Presented by A. Paul, Esq.

## 8. HOTINUS PYRORHYNCUS.

*Fulgora pyrorhyncus*, *Donov. Ins. Ind. Hém.* pl. 7, f. 1, 1.

*F. pyrorhina*, *Westw. Donov. Ins. Ind.* 2 edit. 13. *Trans. Linn. Soc.* xviii. 139, 6.

*F. Rajab*, *Guér. Rev. Zool.* 1839, 183.

*a. Nepal.* Presented by B. H. Hodgson, Esq.

## 9. HOTINUS OCULATUS.

*Fulgora oculata*, *Westw. Trans. Linn. Soc.* xviii. 142, 13, pl. 12, f. 5.

*Fulgora (Hotina) oculata*, *Westw. Orient. Ent.* pl. 36, f. 2.

## 10. HOTINUS SUBOCELLATES.

*Fulgora oculata*, var. ?

*Fulgora subocellata*, *Guérin, Delessert, Souvenirs Voy. Inde.* 66, pl. 16, f. 1. *Rev. Zool.* 1839.

*a. Nepal.* Presented by B. H. Hodgson, Esq.

## 11. HOTINUS SULTANA.

*Hotinus Sultana*, *Adams and White, Proc. Zool. Soc. London*, 1847, 83. *White, Ann. Nat. Hist.* xx. 204.

*a. Borneo.* Presented by Capt. Sir E. Belcher.

## 12. HOTINUS CLAVATUS.

*Fulgora clavata*, *Westw. Linn. Trans.* xviii. 139, 7, pl. 12, f. 1. *Orient. Ent.* pl. 3, f. 1.

*a. b. Silhet.* From the Rev. J. Stainforth's collection.

*c. Assam.* From Mr. Warwick's collection.

*d. ——— ?*

## 13. HOTINUS GEMMATUS.

*Pyrops gemmatus*, *Westw. Orient. Ent.* pl. 3, f. 2.

## Genus 4. PYROPS.

*Pyrops (Spinola)*, *Angot et Serv. Hist. Nat. Hém.* 491, 379.

*Fulgora*, *Linn. Fabr. Deg. Tign. Olivier, Gmelin, Palisot-Beauvois, Donovan, Burmeister, G. R. Gray, Westwood.*

Flata, *Germar.*

Pyrops, *Spinola* (ad partem).

### 1. PYROPS NOBILIS.

*Fulgora nobilis*, *Westw. Trans. Linn. Soc.* xviii. 146, 22, pl. 12, f. 10.

*Pyrops Servillei*, *Spin. Ann. Soc. Ent. Fr.* viii. 237, pl. 11, f. 1.

Malacca.

### 2. PYROPS TENEBROSA.

*Pyrops tenebrosa*, *Spin. Ann. Soc. Ent. Fr.* viii. 235, 3. *Amyot et Serv. Hist. Nat. Hém.* 492, 1.

*Fulgora tenebrosa*, *Fabr. Syst. Ent.* 674, 8. *Sp. Ins.* ii. 314, 9. *Mant. Ins.* ii. 260, 9. *Ent. Syst.* iv. 3, 9. *Syst. Rhyn.* 3, 9. *Gmel. Ed. Syst. Nat.* i. 4, 2090, 11. *Oliv. Enc.* vi. 568, 7. *Stoll, Cic.* 21, pl. 2, f. 7. *Tign. Hist. Nat. Ins.* iv. 108. *Burm. Handb. Ent.* ii. 1, 169. *Gen. Ins.* 1, 8. *Rhyn. Cic. Fulg.* 9, pl. *Westw. Trans. Linn. Soc.* xviii. 142, 14.

*Cicada laternaria fusca*, *Deg. Ins.* iii. 200, 3, pl. 32, f. 1.

*F. africana*, *Pal. Beauv. Ins.* 161. *Hém.* pl. 19, f. 3.

*Flata tenebrosa*, *Germ. Mag. Ent.* iii. 1862. *Thon, Arch.* ii. 2, 47.

*Fulgora flammca?* *Linn. Amœn. Acad.* vi. 399, 39. *Syst. Nat.* ii. 704, 7. *Gmel. Ed. Syst. Nat.* i. 4, 2090, 7. *Fabr. Sp. Ins.* ii. 314, 8. *Mant. Ins.* ii. 260, 8. *Ent. Syst.* iv. 3, 8. *Syst. Rhyn.* 3, 6. *Westw. Trans. Linn. Soc.* xviii. 143, 15.

*a—g.* Congo. Presented by Sir J. Richardson.

*h.* ———? From Mr. Children's collection.

*i.* Port Natal. From Dr. Krauss' collection.

*j.* Port Natal. From M. Guézinus' collection.

*k.* West Africa. From Mr. Rich's collection.

*l.* ———?

*m.* (Pupa?) South Africa. Presented by Dr. A. Smith.

### 3. PYROPS PUNCTATA.

*Pyrops punctata*, *Spin. Ann. Soc. Ent. Fr.* viii. 237, 5.

*Fulgora punctata*, *Oliv. Enc. Méth.* vi. 569, 8. *Stoll, Cic.* 34, pl. 6, f. 28. *Westw. Trans. Linn. Soc.* xviii. 143, 16.

*Flata punctata*, *Germ. Thon, Arch.* ii. 2, 47.

*Fulgora affinis*, *Westw. Trans. Linn. Soc.* xviii. 144, 18, pl. 12, f. 6.

*a, b.* Nepaul. Presented by Major-General Hardwicke.

- c. Ceylon. From the Rev. J. Wenham's collection.  
 d. Silhet. From the Rev. J. Stainforth's collection.  
 e. Hong Kong. Presented by J. C. Bowering, Esq.  
 f—h. Port Natal. From M. Gueinzus' collection.  
 i. Java. From the East India Company's collection.

## 4. PYROPS GUTTULATA.

*Fulgora guttulata*, *Westw. Ann. Nat. Hist.* ix. 118. *Orient. Ent.*  
 pl. 3, f. 3.

North India.

## 5. PYROPS VIRESCENS.

*Fulgora virens*, *Westw. Ann. Nat. Hist.* ix. 118. *Orient. Ent.* pl.  
 3, f. 5.

East India.

## 6. PYROPS MARGINATA.

*Fulgora marginata*, *Westw. Trans. Linn. Soc.* xviii. 144, 17.

*F. punctata*, *G. R. Gray, Griff. An. Kingd. Ins.* ii. 259, pl. 90, f. 1.  
*Burm. Handb. Ent.* ii. 398.

a, b. Cape

## 7. PYROPS PERPUSILLA, Mns.

*Straminea*; *cornu corporis longitudine*; *abdomen supra luteum*;  
*pedes flavi*; *ala antice substraminea, fusco guttata*; *ala pos-*  
*tice limpida.*

Body straw-colour: head and its protuberance as long as the rest of the body: abdomen luteous above: legs yellow: fore-wings very pale straw-colour; a few brown dots on the veins near the tip and along the hind border which is somewhat darker than the rest of the wing; a rather large dot in the disk on the fork of one of the longitudinal veins; hind-wings colourless; veins pale yellow. Length of the body 4 lines; of the wings 9 lines.

a. North Bengal. From Miss Campbell's collection.

## 8. PYROPS ALBIPENNIS.

*Pyrops albipennis*, *Spin. Ann. Soc. Ent. Fr.* viii. 238, 7.  
 Guinea.



## Genus 5. PROLEPTA.

Fulgora, *Fabr. Gmelin, Westwood, Schaum.*

Flata, *Germar.*

Pyrops, *Spinola.*

Capitis cornu gracile, apicem versus compressum, apice subdilatatum.

Distinguished from *Pyrops* by the protuberance of the head, which does not taper gradually from the base, but is compressed before the tip where it again widens.

## 1. PROLEPTA APICALIS.

Fulgora apicalis, *Westwood, Linn. Trans.* xviii. 141, 11, pl. 12, f. 3.  
a, b. Manilla. From Mr. Cuning's collection.

## 2. PROLEPTA DECORATA.

Fulgora decorata, *Westw. Trans. Linn. Soc.* xviii. 141, 12, pl. 12, f. 4.  
Java.

## 3. PROLEPTA HORSFIELDII.

Fulgora Horsfieldii, *Westw. Trans. Linn. Soc.* xviii. 140, 10, pl. 12, f. 2.  
Java.

## 4. PROLEPTA COGNATA.

Fulgora cognata, *Westw. Trans. Linn. Soc.* xviii. 145, 19.

## 5. PROLEPTA OBSCURATA.

Pyrops obscurata, *Spin. Ann. Soc. Ent. Fr.* viii. 237, 4.  
Fulgora obscurata, *Fabr. Sp. Ins.* ii. 315, 10. *Mant. Ins.* ii. 260, 10. *Ent. Syst.* iv. 4, 10. *Syst. Rhyn.* 3, 10. *Gmel. Ed. Syst. Nat.* i. 4, 2090, 12. *Westw. Trans. Linn. Soc.* xviii. 145, 20, pl. 12, f. 7.

Flata obscurata, *Germ. Thon, Arch.* ii. 2, 47.

a. New Holland. Presented by the Haslar Hospital.

b. New Holland. From Mr. Dring's collection.

## 6. PROLEPTA DILATATA.

Fulgora dilatata, *Westw. Trans. Linn. Soc.* xviii. 146, 21, pl. 12, f. 8, 9.

New Holland.

## Genus 6. ENCHOPHORA.

*Enchophora*, *Spin. Ann. Soc. Ent. Fr.* viii. 222.

*Fulgora*, *Olivier, Germar, Burmeister.*

*Flata*, *Germar.*

*Aphæna*, *Guérin.*

*Phrietus*, *Schaum* (ad partem).

## 1. ENCHOPHORA RECURVA.

*Enchophora recurva*, *Spin. Ann. Soc. Ent. Fr.* viii. 222, 1, pl. 10,  
f. 1, 2. *Amyot et Serr. Hist. Nat. Hém.* 496, 1.

*Fulgora recurva*, *Oliv. Enc. Méth.* vi. 569, 11. *Stoll, Cic.* 43, pl.  
9, f. 44.

*Fulgora tuba*, *Germ. Thon, Arch.* ii. 2, 46, 6. *Burm. Handb. Ent.*  
ii. 169, 2.

a—c. South America. From Mr. Warwick's collection.

## 2. ENCHOPHORA VIRIDIPENNIS.

*Enchophora viridipennis*, *Spin. Ann. Soc. Ent. Fr.* viii. 225, 2, pl.  
11, f. 2.

Brazil.

## 3. ENCHOPHORA VARIEGATA.

*Enchophora variegata*, *Spin. Ann. Soc. Ent. Fr.* viii. 225, 3, pl. 12,  
f. 3.

Brazil.

## 4. ENCHOPHORA SERVILLEI.

*Enchophora Servillei*, *Spin. Ann. Soc. Ent. Fr.* viii. 227, 4, pl. 11,  
f. 3.

## 5. ENCHOPHORA FUSCATA.

*Enchophora fuscata*, *Spin. Ann. Soc. Ent. Fr.* viii. 227, 5, pl. 12,  
f. 2.

*Aphæna fuscata*, *Guér. Voy. Coquille, Zool.* 184, pl. *Ins. No.* 10.  
New Guinea.

## 6. ENCHOPHORA TUBERCVLATA.

*Fulgora tuberculata*, *Oliv. Enc. Méth.* vi. 569. *Stoll, Cic.* 86, pl. 23, f. 122. *Germ. Thon, Arch.* ii. 2, 46. *Burm. Handb. Ent.* ii. 169.

Brazil.

## 7. ENCHOPHORA SICCA, Fem.

*Nigro-fusca cervino reticulata*; abdomen *nigrum lateribus supra rufis*; pedes *nigri fulvo maculati apice ferrugini*. *alæ anticae cervinae nigro variae*; *alæ posticae rufae apice nigrae albo guttatae margine postico nigro maculatae*.

Allied to *Aphana haemorrhoidalis*? Body black; head dark fawn-colour, spotted with black, nearly as long as the chest; protuberance of the head slightly clavate, inclined upward and forming an obtuse angle; scutcheon fawn-colour with black dots: sides of the abdomen red above: legs black with numerous tawny spots: feet mostly ferruginous; fore-wings dark fawn-colour or somewhat ferruginous, adorned with very numerous, irregular small black marks: hind-wings red, black with white dots towards the tips, spotted with black along the hind border. Length of the body 19 lines; of the wings 24 lines.

*a, b.* Port Natal. From M. Gueinzus' collection.

## 8. ENCHOPHORA PYRRHOCRYPTA, Mas.

*Fulva, viridi varia flavo tuberculata, rufo guttata*; cornu recurvum; scutellum *nigro bimaculatum*; pedes *virides*; *alæ anticae rufo-fuscae croceo guttatae*; *alæ posticae rufae, apice fuscae*.

This species seems to be a connecting link between *Phrictus* and *Enchophora*. Body tawny, dull, tinged with green, covered with numerous small yellow tubercles and with many very little red dots: head full half the breadth of the chest; a longitudinal ridge on the fore part of the crown, and a slight transverse ridge on its disk, on each side of which adjoining the eye there is a green upright angular horn with black dots; protuberance of the head green, rugulose, ridged, apparently crumpled, recurved till it almost touches the fore part of the crown, then inclined upward and terminating in three knobs: mouth tawny, extending far beyond the hind-hips: eyes prominent: fore-chest surrounded by a slight ridge, somewhat excavated on the disk, deeply keeled along the middle: scutcheon of the middle-chest with a black spot on each side near the fore border, having a rim towards its tip which is pointed; five ridges in the disk,

the two side pair short and very oblique: abdomen obconical, not longer than the chest: legs dull green, furrowed, clothed with short black hairs; spines of the hind-shanks tawny with black tips: forewings reddish brown, adorned with numerous small orange spots, paler and tinged with green towards the tips; veins green, very numerous towards the tips: hind-wings bright red, with brown tips: veins bright red. Length of the body 8 lines; of the wings 22 lines.

α. Para. From Mr. Stevens' collection.

#### 9. ENCHOPHORA? ENSIFERA.

*Flata ensifera*, *Germ. Thon, Arch.* ii. 2, 47.

*Fulgora?* *ensifera*, *Westw. Trans. Linn. Soc.* xviii. 148, 27.

#### Sub-Tribe 2. LYSTROIDES.

*Lystroïdes*, *Spinola, Ann. Soc. Ent. Fr.* viii. 202, 240.

*Fulgorides*, *Amyot et Serville* (ad partem).

*Fulgoridæ*, *Schaum* (ad partem).

#### Genus 1. APHÆNA.

*Aphæna*, *Guérin*.

*Lystra*, *Fabr. Donovan, Germar, G. R. Gray*.

*Flata*, *Germar*.

*Fulgora*, *Olivier, Gmelin, G. R. Gray*.

*Aphana*, *Burmeister, Amyot et Serville, Hope, Westwood, White*.

*Penthicus*, *Blanchard*.

#### 1. APHÆNA DISCOLOR.

*Aphæna discolor*, *Guér. Voy. Belanger, Zool.* 452, pl. 3, f. 2. *Spin. Ann. Soc. Ent. Fr.* viii. 242, 1.

Java, Cochin-China.

#### 2. APHÆNA NIGROMACULATA.

*Aphæna nigromaculata*, *Guér. Voy. Belanger, Zool.* 457, v. pl. 3, f. 1. *Spin. An. Soc. Ent. Fr.* viii. 243, 2.

*Fulgora* (*Aphæna*) *nigromaculata*, *G. R. Gray, Griff. An. King. Ins.* pl. 90, f. 6. pl. 138, f. 2.

Cochin-China.

## 3. APHÆNA CORTICINA.

*Aphana corticina*, *Burm. Handb. Ent.* ii. 1, 166, 1.  
Brazil.

## 4. APHÆNA FARINOSA.

*Aphana farinosa*, *Burm. Handb. Ent.* ii. 1, 166, 2.  
*Aphæna farinosa*, *Spin. Ann. Soc. Ent. Fr.* viii. 244, 3.  
*Lystra farinosa*, *Fabr. Syst. Rhyn.* 57, 3. *Germ. Thon, Arch.* ii.  
2, 52, 4.  
Sumatra.

## 5. APHÆNA NIGROPUNCTATA.

*Aphæna nigropunctata*, *Guér. Voy. de la Coquille, Zool.* 185.  
*Spin. Ann. Soc. Ent. Fr.* viii. 248, 5.  
*Aphana nigropunctata*, *Amyot et Serv. Hist. Nat. Hém.* 497, 2.  
Java.

## 6. APHÆNA ROSEA.

*Aphæna rosea*, *Guér. Voy. Belanger, Zool.* 454, pl. 3, f. 3.  
Sumatra.

## 7. APHÆNA HÆMOPTERA.

*Aphæna hæmoptera*, *Spin. Ann. Soc. Ent. Fr.* viii. 248, 8. *Westw. Trans. Linn. Soc.* xviii. 49, 6, pl. 12, f. 13.  
*Flata hæmoptera*, *Perty, Del. An. Art.* 176, pl. 35, f. 3. *Burm. Handb. Ent.* ii. 398.

## 8. APHÆNA PULCHELLA.

*Aphæna pulchella*, *Guér. Voy. Coquille, Zool.* 186. *Spin. Ann. Soc. Ent. Fr.* viii. 249, 9.  
Java.

## 9. APHÆNA CICATRICOSA.

*Flata cicatricosa*, *Germ. Thon, Arch.* ii. 2, 47. *Westw. Trans. Linn. Soc.* xviii. 149, 7.

## 10. APHÆNA AMABILIS.

*Aphana amabilis*, *Hope, Trans. Linn. Soc.* xix. 132, 19, pl. 12, f. 1.  
Silhet.

11. *APHÆNA HÆMORRHOIDALIS*

*Fulgora hæmorrhoidalis*, *Oliv. Enc. Méth.* vi. 569. *Stoll, Cic.* 103, pl. 27, f. 148.

*Flata hæmorrhoidalis*, *Germ. Thon, Arch.* ii. 247.

Cape.

12. *APHÆNA SUBMACULATA* ?

*Aphana submaculata* ? *Westw. Duncan's Nat. Libr.* i. 284, pl. 24, f. 1.

*A. aurantia* ? *Hope, Trans. Linn. Soc.* xviii. 443, pl. 31, f. 2.

Var. ? *Fulva viridi varia* ; abdomen ochraceum, lateribus viridi varium ; pedes viridi-ochracei, femora fusco immaculata ; alæ albo maculatae, anticae virides, posticae ochraceae.

A recurved horn on the head : wings ample : body tawny : crown of the head with a ridge on each side, furnished with a horn, which is green, and is inclined backward on the head and the shield and extends to half the length of the latter : face with four slight ridges : mouth tawny with a black tip, extending a little beyond the hind-hips : fore border of the shield partly green, slightly ridged, somewhat excavated on each side for the reception of the eyes : abdomen obconical, orange, partly green on each side, a little longer than the chest : legs dull orange, tinged here and there with green ; a brown spot on each thigh ; hind-shanks armed with spines, and terminating in a cluster of small spines : wings ample ; fore-wings green, adorned with numerous white dots above and with white spots beneath : hind-wings orange, with a few white dots above and with more white spots beneath. Length of the body 9 lines ; of the wings 34 lines.

*a, b.* Silhet. From Mr. Argent's collection.

13. *APHÆNA AURORA* ?

*Aphana Aurora*, *Hope, Trans. Linn. Soc.* xix. 133, 20, pl. 12, f. 2.

*Ferruginea* ; abdominis segmentorum margines postici rufi ; pedes ferruginei ; alæ crocae, apice ferrugineae ; alæ anticae subfasciatae ; alæ posticae albo subtristatae.

A recurved horn on the head : wings ample : body ferruginous : ridges of the crown of the head enclosing two semicircular compartments ; underside indistinctly ridged : mouth pale ferruginous, with a darker tip, reaching far beyond the hind-hips : abdomen nearly elliptical, longer than the chest ; hind borders of the seg-

ments bright red: legs pale ferruginous, furrowed, pubescent; tips of the claws black; hind-shanks armed with spines: wings orange for half the length from the base, ferruginous from thence to the tips; some pale indistinct bands on the orange part of the forewings; that part of the hind-wings adorned with short irregular white streaks; inner border and part of the hind border white. Length of the body  $8\frac{1}{2}$  lines; of the wings 27 lines.

a. Philippine Islands. From Mr. Cuming's collection.

#### 14. APHÆNA GUTTATA.

*Enchophora guttata*, White, *Ann. Nat. Hist.* 1846, xvii. 331.

A recurved horn on the head: wings of moderate size: forewings much longer than the hind-wings; their tips rather acute.

a. South America. Presented by E. Doubleday, Esq.

#### 15. APHÆNA SANGUINEA.

*Fulgora sanguinea*, Oliv. *Enc. Méth.* vi. 573. Stoll, *Cic.* 32, pl. 5, f. 23.

Var. ♀ *Ferruginea, viridi et fulvo varia*; *scutelli discus niger, fuleo maculatus*; *abdominis segmentorum margines postici nigri*; *pedes ferruginei, antici nigro vittati*; *alæ anticæ ferruginæ, fusco varicæ, marginibus fulvo maculatæ, vitta nigra undata ornatæ.*

No horn on the head; fore-wings narrow, acute, very much longer than the hind-wings: body ferruginous: head greenish-tawny, with a quadrangular ridge along the borders above, rounded in front, brown, shining, with four longitudinal ridges beneath; epistoma triangular with a tawny border: mouth ferruginous, extending far beyond the hind-hips: shield of the chest green, pale tawny and forming a ridge along the borders, having also a longitudinal ridge, and along the fore border an undulating ridge: scutcheon tawny; disk black with tawny dots: on each side two black spots, between which and the disk there is a zigzag ridge; a longitudinal ridge in the middle terminates in a black spot on the fore border; sides slightly concave: abdomen obconical, longer than the chest; hind borders of the segments black above: legs ferruginous; fore-legs striped with black; hind-hips armed with spines: wings long and rather narrow: fore-wings much longer than the hind-wings, ferruginous, reddish beneath for three-fourths of the length from the base, marked here and there with brown, adorned with tawny spots along the fore border and towards the tips, and having a waved

black stripe extending along the whole length of the disk; from the middle of this stripe a short slightly oblique black band passes to the hind border: hind-wings bright red, streaked with black along the veins, blackish-brown towards the tips, near which there are two or three colourless and sometimes confluent spots on the hind border, the latter is slightly concave at the termination of the red part; cross-veins much more numerous and more distinct towards the tips than towards the base. Length of the body 12 lines; of the wings 40 lines.

*a.* Brazil. From Mr. Stevens' collection.

#### 16. *APHÆNA SCUTELLARIS.*

*Aphana scutellaris*, *White, Ann. Nat. Hist.* 1846, xvii. 330.

No horn on the head: fore-wings of moderate breadth, not much longer than the hind-wings: thorax with a ridge. This description will also apply to the ten following species.

*a—d.* Borneo. From Mr. Low's collection.

*e.* ———? Presented by the Entomological Club.

#### 17. *APHÆNA SAUNDERSII.*

*Aphana Saundersii*, *A. scutellaris*, var. *Saundersii*, *White, Ann. Nat. Hist.* 1846, xvii. 330.

*a—e.* India. Presented by W. W. Saunders, Esq.

#### 18. *APHÆNA LEUCOSTICTICA.*

*Aphana leucostictica*, *White, Ann. Nat. Hist.* xv. 37.

*a.* Philippine Islands. From Mr. Cuming's collection.

#### 19. *APHÆNA ATOMARIA.*

*Aphana atomaria*, *Burm. Handb. Ent.* ii. 1, 167, 3.

*Lystra atomaria*, *Fabr. Syst. Rhyn.* 57, 4. *Germ. Thon, Arch.* ii. 2, 52, 7.

*a.* N. India. From Mr. Warwick's collection.

*b.* Java. From the East India Company's collection.

*c, d.* ———?



## 20. APHÆNA VARIEGATA.

*Aphæna variegata*, Guér. Voy. Belanger, Zool. 455. Règn. Anim.

Ins. pl. 58, f. 3. Spin. Ann. Soc. Ent. Fr. viii. 247, 4.

*Aphana variegata*, Amyot et Serr. Hist. Nat. Hém. 497, 1.

*Penthicus variegatus*, Blanch. Hist. Nat. Ins. iii. 171. Hém. pl. 12, f. 4.

a. Philippine Islands. From Mr. Cuming's collection.

## 21. APHÆNA PULCHRA.

*Lystra pulchra*, G. R. Gray, Griff. Ed. Anim. Kingd. Ins. ii. 260. pl. 90, f. 5.

## 22. APHÆNA CAJA, Mas.

*Flavo-fusca; metathorax et abdomen rufa, hujus discus niger; pedes fuscì viridì vittati; alæ basì rufæ; alæ anticæ fulvæ; basim versus luteæ viridì maculatæ, apices virides subfasciatæ; alæ posticæ luteæ, basì nigro maculatæ, apice fuscae albo guttatae.*

Body yellowish brown: head and shield of the chest somewhat reticulated; the former ridged across in front: mouth brown, extending far beyond the hind-hips: hind-chest red: abdomen bright red; disk black, with the exception of the hind borders of the segments: legs brown, streaked with green: wings red at the base: fore-wings tawny luteous, with olive-green spots towards the base, towards the tip olive-green with a pale green irregular and indefinite band: hind-wings luteous, adorned with white dots; these are mostly near the tip, which is brown; towards the base are five black spots, three of which are near the hind border. Length of the body  $8\frac{1}{2}$  lines; of the wings 24 lines.

a, Silhet. From Mr. Stainforth's collection.

## 23. APHÆNA BASIRUFA, Mas.

*Fusca; metathorax et abdomen rufa, hoc subtus nigrum; pedes nigri; femora et tibiæ flavo variae; alæ anticæ virides fusco guttatae et maculatæ, albo bimaculatæ, ad costam fulvæ; alæ posticæ luteæ, nigro et albo maculatæ, basì rufæ, apice nigro-fuscae caeruleo maculatæ.*

Body brown: crown of the head surrounded by a ridge which encloses a single compartment; under side slightly ridged, finely

furrowed: mouth brown: a single ridge on the shield of the chest: three ridges on the scutcheon; the side pair curved and inclosing a semicircle, of which the middle one is the radius: hind-chest red: abdomen bright red above, black beneath: legs black, furrowed; thighs and shanks marked with yellow; hind-shanks armed with spines: fore-wings olive-green, adorned with very numerous dark brown dots and spots, which are partly confluent towards the tip; fore border tawny from the base to half the length, beyond which there is a nearly square white spot, and the hind border has a corresponding white spot: hind-wings luteous, red at the base and along the inner border, adorned with about twelve black spots and dots and with four white dots, blackish-brown along the hind border and towards the tip, near which there is an irregular blue spot. Length of the body 9 lines; of the wings 25 lines.

*a, b.* Silhet. From Mr. Stainforth's collection.

#### 24. APHENA JO. MAS.

*Flavo-fusca; caput et mesothorax nigro punctata; abdomen rufum, fusco fasciatum, lateribus nigro vittatum, subtus nigro maculatum; pedes nigri; femora et tibiae nigro fasciate; alae anticae flavo-fuscae nigro variae, apice albida maculatae alae posticae luteae nigro alboque maculatae, basi rufae, apice nigrae caeruleo maculatae.*

Nearly allied to *A. Confucius*, but distinguished by the hind-wings, which have some white dots in the disk, and a blue spot on each black tip. Body yellowish-brown: head and middle-chest punctured with black, ridged as usual: mouth brown, as long as the body: hind-chest red: abdomen bright red; underside spotted with black, having a black stripe along each side, and a brown hind border to each segment: legs black; thighs and shanks adorned with irregular yellow bands; hind-shanks armed with spines: fore-wings yellowish brown with numerous black marks which are confluent and form a black spot at the tip of the hind border; this spot has a yellowish white spot adjoining: hind-wings luteous, red at the base and along the inner border, adorned with about twelve black spots and with four white spots, brown along the hind border, terminating in a very large black spot which has a blue disk. Length of the body 8 lines; of the wings 22 lines.

*a.* North India. From Mr. Warwick's collection.

## 25. APHENA ALBIFLOS, Fcm.

*Viridis, subtus rufa; caput supra fulvum; pedes ferruginei; femora rufa; alae anticae nigrae, viridi notatae, apice ferruginae; alae posticae fuscae, cyaneo-viridi maculatae, apicibus marginibusque posticis albae.*

Body green above, bright red beneath: crown of the head tawny, indistinctly ridged along the border; face slightly ridged: mouth red with a black tip, nearly as long as the body: a concavity corresponding to the eye on each side of the fore border of the shield, the fore part of whose side borders is black; hind border tawny; longitudinal ridge almost obsolete: abdomen obconical, much longer than the chest, thickly clothed with white down: legs ferruginous, furrowed; thighs red; hind-shanks slightly spined: fore-wings black, adorned with numerous little green marks; reticulated part ferruginous: hind-wings brown, adorned with bluish-green spots, white at the tips and along the hind border. Length of the body 8 lines; of the wings 26 lines.

a. Malabar Coast. Presented by T. Ward, Esq.

## \* 26. APHENA CONFUCIUS.

Aphana Confucius, *White, Ann. Nat. Hist.* xviii. 21.

a. China. Presented by G. T. Lay, Esq.

## 27. APHENA DIVES, Mas.

*Ferruginea, metathorac et abdomen nigra, hoc subtus rufum; pedes nigri; femora postica fusca; alae virides; alae anticae fusco guttatae, croceo subtristata, apice fuscae; alae posticae fusco maculate, apice albo-cinereae marginibus posticis albae.*

Body dark ferruginous: disk of the crown of the head rather concave: borders slightly ridged: fore border slightly inclined upward: mouth dark brown, extending far beyond the hind-hips: shield of the middle-chest with a slight longitudinal furrow; fore border very undulating: a black band along the fore border of the scutcheon: hind-chest black: abdomen obconical, larger than the chest, black above, thickly clothed with white down, red beneath: legs black, furrowed; thighs brown; hind-shanks armed with spines: fore-wings green, adorned between the veins with orange streaks, which are interrupted by very numerous brown dots, the latter are

sometimes confluent; a tawny slightly curved band separates this part from the reticulated tips, which are brown with tawny veins: hind-wings green with numerous brown spots, gray mingled with white towards the tips, white along the inner border. Length of the body 7 lines; of the wings 20 lines.

a. Malabar Coast. Presented by T. Ward, Esq.

Var.? *Flavo-fusca, subtus rufa; metathorax niger; abdomen rufum, nigro fasciatum; pedes nigri, femora rufa; alæ anticae flavae, fusco notatae; apice flavo-fuscae; alæ posticae fuscae, maculis sublimpidis variae.*

A recurved horn on the head: wings of moderate size; fore-wings not much longer than the hind-wings; their tips obtuse. Body yellowish-brown, red beneath: crown of the head slightly ridged and furrowed; front rather prominent, furnished with a slender, black, linear, furrowed horn which is inclined backward nearly to the hind border of the shield: mouth ferruginous with a darker tip extending nearly to the tip of the abdomen: an excavation partly inclosing the eye on each side of the front of the shield, the fore part of whose side borders is black: hind-chest mostly black: abdomen red, nearly elliptical, a little longer than the chest; a black band across each segment above: legs black, furrowed; thighs red; hind-shanks armed with spines: fore-wings pale dingy yellow, adorned with very numerous brown marks; reticulated part yellowish-brown: hind-wings brown, with many almost colourless spots which are partly confluent; hind border almost colourless; tip pale brown. Length of the body 7 lines; of the wings 20 lines.

a. East India.

## 28. *APIRENA TORRIDA*, MAS.

*Rufa, subtus fulva; prothorax et scutum flavo bimaculata, hujus discus nigricans; abdomen lateribus utrinque flavum; pedes rufi, tarsi nigri; alæ flavo-fuscae, basi rufae; alæ anticae fulvae subbrittae.*

Body red, tawny beneath: crown of the head surrounded by a ridge, which is highest in front, and is imperfectly divided into two compartments, the middle ridge not extending to the fore border: front with six longitudinal ridges, between which are many little furrows: a longitudinal ridge on the epistoma: mouth tawny with a black tip extending far beyond the hind-hips: shield of the chest transversely rugulose, deeply ridged in front and along the middle, on each side of which it is concave and has a large yellow spot: scutcheon much sculptured, blackish with two yellow spots in front:

abdomen obconical, longer than the chest, yellow on each side and beneath: legs red, furrowed; feet black; hind-shanks armed with spines: fore-wings yellowish-brown, red towards the base; a tawny interval between the red and the brown part; reticulated part occupying more than half the length of the wing: hind-wings lurid, bright red towards the base. Length of the body 10 lines; of the wings 22 lines.

a. Congo. Presented by Sir J. Richardson.

### 29. APHÆNA MOROSA.

*Aphana* ? *morosa*, *Westwood, MSS.* ?

Mas. *Fulva; abdomen nigro varium; pedes ferruginei; alæ anticae virides, fulvo maculate, ad costam maculis quadratis flavis ornate, apice nigre; alæ postice rufæ, apice nigre.*

Body tawny, short and stout: crown of the head surrounded by a ridge, somewhat pointed in front; face slightly rugulose, not ridged: mouth ferruginous, with a black tip extending to the hind-bips: shield of the middle-chest not ridged: abdomen partly black, broader but not longer than the chest: legs ferruginous; anterior shanks slightly widened; hind-shanks armed with spines: fore-wings green, adorned with many tawny spots and along the fore border with five quadrilateral yellow spots; reticulated part black: veins tawny: hind-wings bright red with black tips. Length of the body 6 lines: of the wings 18 lines.

a, b. Port Natal. From M. Guenzius' collection.

### 30. APHÆNA DELICATULA.

*Aphana delicatula*, *White, Ann. Nat. Hist.* xv. 37.

a, b. Canton. Presented by G. T. Lay, Esq.

### 31. APHÆNA IMPERIALIS.

*Aphana imperialis*, *White, Ann. Nat. Hist.* 1846, xvii. 330.

a. Silhet. From the Rev. J. Stainforth's collection.

## Genus 2. EPISCIVS.

*Episcivus*, *Spinola, Ann. Soc. Ent. Fr.* viii. 249.

*Flata*, *Germar.*

*Fulgora*, *Westwood.*

## 1. EPISCUS GUERINII.

*Episcus Guerinii*, *Spin. Ann. Soc. Ent. Fr.* viii. 252, pl. 13, f. 2.

*Amyot et Serv. Hist. Nat. Hém.* 495, 1.

*Flata platyrhina*, *Germ. Thon, Arch.* ii. 2, 46.

*Fulgora platyrhina*, *Westw. Trans. Linn. Soc.* xviii. 148, 26, pl. 12, f. 11.

*a.* East India.

## 2. EPISCUS? AMABILIS.

*Fulgora* (*Episcus*?) *amabilis*, *Westw. Ann. Nat. Hist.* ix. 118. *Ar-  
cana Ent.* 89, pl. 71, f. 1.

This species seems allied to *Pyrops* and *Euchophora*.

## Genus 3. DILOBURA.

*Dilobura*, *Spinola, Ann. Soc. Ent. Fr.* viii. 254.

## 1. DILOBURA SPINOLÆ.

*Dilobura Spinolæ*, *Amyot et Serv. Hist. Nat. Hém.* 494, 1.

*D. corticina*, *Spin. Ann. Soc. Ent. Fr.* viii. 256, pl. 14, f. 1.

Brazil.

## 2. DILOBURA SUBOCELLATA.

*Dilobura subocellata*, *Westw. Arc. Ent. Note.* pl. 71.

Brazil.

## Genus 4. OMALOCEPHALA.

*Omalocephala*, *Spinola, Ann. Soc. Ent. Fr.* viii. 261.

*Fulgora*, *Fabr.*

*Cercopis*, *Fabr.*

## 1. OMALOCEPHALA FESTIVA.

*Omalocephala festiva*, *Spin. Ann. Soc. Ent. Fr.* viii. 261, 1.

*Amyot et Serv. Hist. Nat. Hém.* 493, 1.

*Fulgora festiva*, *Fabr. Ent. Syst.* iv. 517. *Syst. Rhyn.* 4, 17. *Donov. Ins. Ind. Hém.* pl. 1, f. 2.

*a—c.* East India.

## 2. OMALOCEPHALA CINCTA.

*Omalocephala cincta*, *Spin. Ann. Soc. Ent. Fr.* viii. 262, 2. *Amyot et Serv. Hist. Nat. Hem.* 493, 2.

*Cercopis cincta*, *Fabr. Syst. Rhyn.* 90, 9.

Senegal.

## 3. OMALOCEPHALA? PLANIROSTRIS.

*Fulgora planirostris*, *Donov. New Holl. Hemipt.* pl. 1, f. 1.

New Holland.

## Genus 5. CYRENE.

*Cyrene*, *Westw. Arc. Ent.* ii. 35.

### 1. CYRENE GUTTULATA.

*Cyrene guttulata*, *Westw. Arc. Ent.* ii. 35, pl. 57, f. 3, 3a.

*a.* Java. From Mr. Argent's collection.

## Genus 6. ODONTOPTERA.

*Odontoptera*, *Carreno, Ann. Soc. Ent. Fr.* x. 275.

### 1. ODONTOPTERA SPECTABILIS.

*Odontoptera spectabilis*, *Carreno, Ann. Soc. Ent. Fr.* x. 277, pl. v. No. 2.

### 2. ODONTOPTERA CARRENONIS.

*Odontoptera Carrenonis*, *Signoret, Ann. Soc. Ent. Fr.* 2 Sér. vii. 177, pl. 6.

## Genus 7. RHINORTHA.

*Omalocephalæ* affinis: caput conicum.

Distinguished from *Omalocephala* by the shape of the head, which is flattened and conical in front.

## 1. RHINORTHA GUTTATA, Mas.

*Cervina, nigro quatuordecim-guttata; pectus albidum; pedes fulvi; ala flavo-fusca, basi rufa, ad costam virides.*

Body pale fawn-colour, nearly flat above, buff beneath; head flat, conical, longer than the shield of the chest, adorned above with four black dots, the inner pair of which are in advance of the outer pair; a ridge above, along each side and along the front which forms a thin edge: mouth pale fawn-colour with a ferruginous tip, reaching beyond the hind-hips: eyes brownish, adorned with five yellow bands: feelers yellow: shield adorned with four black dots, the middle pair larger and slightly in advance of the outer pair: scutcheon with ten black dots, six along the fore border and two along each side: breast whitish: abdomen obconical, not longer than the chest: legs pale tawny, darker towards the tips; claws black: wings yellowish-brown, red towards the base; veins and fore border green. Length of the body 9 lines; of the wings 22 lines.

a. Port Natal. From M. Guéinzus' collection.

b. Pupa? Zoolu, South Africa. Presented by G. F. Angas, Esq.

## Genus 8. LYSTRA.

*Lystra, Fabr. Spin. Ann. Soc. Ent. Fr. viii. 263.*

*Cicada, Linn. Drury, Sulzer.*

*Cicada (Deflexa), Gmelin.*

*Fulgora, Olivier.*

## 1. LYSTRA LANATA.

*Lystra lanata, Germ. Thon, Arch. ii. 2, 52, 2. Mag. Ent. iii. 226, 1. Duméril, Cons. Gen. Ins. i. 219, pl. 38, f. 5. Burm. Handb. Ent. ii. 1, 164, 1. Gen. Ins. 1. Rhyn. Cic. Fulg. Lyst. 6. Spin. Ann. Soc. Ent. Fr. viii. 265, 1. Blanch. Hist. Nat. Ins. iii. 172, 1. Amyot et Serv. Hist. Nat. Hém. 499, 1.*

*Cicada lanata, Linn. Syst. Nat. i. 2, 711, 42. Mus. Lud. Utr. 163, 10. Drury, Ins. ii. pl. 37, f. 3. Sulz. Hist. Ins. pl. 9, f. 11. Stoll, Cic. 46, pl. 9, f. 49. Gmel. Ed. Syst. Nat. i. 4, 2113, 42.*

*Fulgora lanata, Oliv. Enc. Méth. vi. 573. 32.*

Var. *Lystra morio, Burm. Handb. Ent. ii. 1. Gen. Ins. 1. Rhyn. Cic. Fulg. Lyst. 4.*

a. Brazil. Presented by the Entomological Club.

b. Para. From Mr. Bates' collection.

c—j. Brazil.



2. *LYSTRA PULVERULENTA*.

- Lystra pulverulenta*, *Burm. Handb. Ent.* ii. 1, 165, 2. *Gen. Ins.* 1. *Rhyn. Cic. Fulg. Lyst.* 5. *Spin. Ann. Soc. Ent. Fr.* viii. 266, 2. *Blanch. Hist. Nat. Ins.* iii. 172, 2. *Hém.* pl. 13, f. 2. *Amyot et Serv. Hist. Nat. Hém.* 499, 2. *Crochard's Ed. Règne Anim. Ins.* pl. 97, f. 2.
- L. lanata*, *Fabr. Syst. Rhyn.* 56, 2. *Stoll, Cic.* 47, pl. 10, f. 50. *Germ. Thon, Arch.* ii. 2, 52, 2.
- Cicada lanata*, *Fabr. Sp. Ins.* ii. 324, 12. *Mant. Ins.* ii. 268, 13, *Ent. Syst.* iv. 30, 16.
- Fulgora pulverulenta*, *Oliv. Enc. Méth.* vi. 573, 33.
- a. South America.

3. *LYSTRA DIMIDIATA*.

- Lystra dimidiata*, *Hope, Trans. Linn. Soc.* xix. 133, 22, pl. 12, f. 4. Silhet.

4. *LYSTRA PUNICEA*.

- Lystra punicea*, *Hope, Trans. Linn. Soc.* xix. 133, 23, pl. 12, f. 5. Silhet.

5. *LYSTRA WESTWOODII*.

- Lystra Westwoodii*, *Parry, Hope, Trans. Linn. Soc.* xix. 21, 133, pl. 12, f. 3. Silhet.

6. *LYSTRA COSTATA*.

- Lystra costata*, *Fabr. Syst. Rhyn.* 59, 10. *Stoll, Cic.* 35, pl. 6, f. 30. *Burm. Gen. Ins.* i. *Rhyn. Cic. Fulg. Lyst.* 3.
- South America.

7. *LYSTRA MULTIGUTTATA*.

- Lystra multiguttata*, *Burm. Gen. Ins.* 1. *Rhyn. Cic. Fulg. Lyst.*
- Brazil.

8. *LYSTRA CRUENTA*.

- Lystra cruenta*, *Burm. Gen. Ins.* 1. *Rhyn. Cic. Fulg. Lyst.* 1.
- Brazil.

9. *LYSTRA CROCEA*, Mas.

*Fusca, fulvo et viridi varia, rufo guttata, subtus crocea; abdomen nigrum, flavo bivittatum; opercula crocea; pedes nigri, flavo fasciati, femora anteriora lutea; alæ anticae fuscae viridi maculate; alæ posticae virides, margine fusca albo-guttata ornatae.*

Body brown, hairy, with tawny dots: crown of the head greenish-yellow, adorned with red dots, forming on its fore side a prominent edge which is slightly concave and has an angle on each side; face greenish with red dots towards the fore border, having a longitudinal ridge, and on each side an oblique ridge which proceeds from the angle; there are two other ridges towards the epistoma which has a spindle-shaped tawny stripe on its disk, and a green ridge along each side: mouth black, extending to the tip of the abdomen: eyes prominent: shield of the chest with a longitudinal ridge which is enclosed in a greenish-yellow red-dotted stripe, the latter widens over the disk of the scutcheon, and there it sends forth two tawny branches on each side which is adorned with a tawny spot; hind-chest with transverse greenish-tawny ridges; under side saffron-colour; abdomen black, obconical, a little shorter than the chest, adorned above with saffron-coloured plates, and with a yellow stripe along each side: legs black, hairy, furrowed; shanks and hind-thighs adorned with yellow bands; anterior thighs luteous with black tips; hind-shanks armed with spines: fore-wings brown, adorned with numerous olive-green spots and dots, some of which are confluent and form an oblique stripe; they are scarce towards the tips: hind-wings pale sea-green with a broad brown border which includes a few white dots. Length of the body 6 lines; of the wings 23 lines.

a. Venezuela. From Mr. Dyson's collection.

10. *LYSTRA TEREBRIFERA*, Mas.

*Nigra, fulvo varia, subtus rufo maculata; abdomen fulvum; pedes nigri, femora antica basi rufa; alæ fuscae.*

Body black: crown of the head tawny, forming on its fore side a prominent edge which is slightly concave and has an angle on each side; face tawny towards the fore border, having a longitudinal ridge, and on each side an oblique ridge which proceeds from the angle; there are two other ridges towards the epistoma which has also a longitudinal tawny ridge: mouth black, extending nearly to the tip of the abdomen: eyes prominent: shield of the chest dull, slightly rugulose, with a longitudinal ridge which is enclosed in a

greenish-yellow stripe; the latter widens over the disk of the scutcheon which is slightly ridged on each side; underside adorned on each side with two red spots and with two red oblique stripes which are grooved for the reception of the anterior thighs towards the base: hind-chest transversely ridged: abdomen tawny above with the exception of the base, a little longer and broader than the chest: legs black, furrowed, anterior hips and the base of the anterior thighs red; hind-shanks armed with spines: fore-wings dark brown; reticulated part paler, divided from the other region by an indistinct greenish-white band which is mostly developed on the hind border: hind-wings dark brown, paler towards the base, grayish along the hind border. Length of the body 7 lines; of the wings 23 lines.

a. Venezuela. From Mr. Dyson's collection.

### Genus 9. PARALYSTRA.

*Paralystra*, White, *Ann. and Mag. Zool. and Bot.* xviii. 25.

#### 1. PARALYSTRA EMMA.

*Paralystra Emma*, White, *Ann. and Mag. Zool. and Bot.* xviii. 25, pl. 1, f. 2.

a. Brazil. Presented by J. P. G. Smith, Esq.

### Genus 10. CALYPTOPROCTUS.

*Calyptoproctus*, Spinola, *Ann. Soc. Ent. Fr.* viii. 266.

*Fulgora*, Olivier.

*Lystra*, Perty.

*Pæocera*, Burmeister, Schaum.

#### 1. CALYPTOPROCTUS LYSTROIDES.

*Calyptoproctus lystroides*, Spin. *Ann. Soc. Ent. Fr.* viii. x. 269, 1, pl. 12, f. 5. Amyot et Serv. *Hist. Nat. Hémi.* 501, 1.

Var. *Sequentis*?

#### 2. CALYPTOPROCTUS ELEGANS.

*Calyptoproctus elegans*, Spin. *Ann. Soc. Ent. Fr.* viii. 269, 2.

*Fulgora elegans*, Oliv. *Enc. Méth.* x. 576, 36. Stoll, *Cic.* 81, pl. 21, f. 111.

*Pæocera elegans*, Burm. *Handb. Ent.* ii. 165.

a. Honduras. From Mr. Dyson's collection.

b. Venezuela. From Mr. Dyson's collection.

## 3. CALYPTOPROCTUS LUGUBRIS.

*Calyptoproctus lugubris*, *Spin. Ann. Soc. Ent. Fr.* viii. 270, 3.

*Lystra lugubris*, *Perty, Del. An. Art.* 177, pl. 33, f. 5.

Brazil.

## 4. CALYPTOPROCTUS MARMORATUS.

*Calyptoproctus marmoratus*, *Spin. Ann. Soc. Ent. Fr.* viii. 271, 4.

*Amyot et Serv. Hist. Nat. Hém.* 501, 2.

North America.

## 5. CALYPTOPROCTUS LUCTUOSUS.

*Calyptoproctus luctuosus*, *Spin. Ann. Soc. Ent. Fr.* viii. 272, 5.

## 6. CALYPTOPROCTUS HETEROSCELIS.

*Calyptoproctus heteroscelis*, *Spin. Ann. Soc. Ent. Fr.* viii. 273, 6.

*Lystra heteroscelis*, *Lefebvre, MSS.*

*Lystra tibialis?* *Germar.*

Brazil.

## Genus 11. POLYDYCTYA.

*Polydictya*, *Guérin, Icon. du Règne Anim. Texte, Ins.* 358.

*Eurybrachys*, *Hope.*

*Lystra*, *Westwood, Signoret.*

*Aphana*, *Schaum.*

## 1. POLYDYCTYA BASALIS.

*Polydictya basalis*, *Guér. Icon. Règn. Anim. Texte, Ins.* 359.

*Eurybrachys basalis*, *Hope, Trans. Linn. Soc.* xix. 134, pl. 12, f. 6.

*a, b.* Silhet. From the Rev. J. Stainforth's collection.

*c, d.* Silhet. From Mr. Argent's collection.

## 2. POLYDICTYA TRICOLOR? Mas et Fem.

*Lystra tricolor?* Westw. *Arc. Ent.* ii. 35, pl. 57, f. 4.

*Rufa, nigro fasciata viridi varia; pedes rufi; alæ anticae fuscae basi stramineae nigro maculatae; alæ posticae rufae apice fuscae.*

Body bright red, smooth, shining: head dull tawny, tinged with green, narrower than the thorax; crown short, somewhat excavated, surrounded by a ridge, having a brown spot on each side; front large, flat, scutcheon-shaped, with large shallow excavations along each side, in the female reticulated with green on the fore border and along each side, which is green; face and epistoma black in the male, green with a red disk in the female: mouth tawny, extending a little beyond the hind-hips: fore-chest having in front a black band which is broader in the male than in the female; scutcheon of the middle-chest black, excavated and red along the hind border: hind-chest rather large, slightly excavated, with a rim along the hind border, black in the male: abdomen nearly linear, not longer than the chest, dark olive-green towards the base in the male: legs red, furrowed; hind-shanks armed with spines: fore-wings brown, pale straw-colour for near half the length from the base, adorned with six black spots; three of these form an interrupted band near the base; the other three are in a transverse line on the middle of the pale part, the middle one is wanting in the left wing of the male; a straw-coloured spot on the brown part rather beyond the middle of the fore border: hind-wings bright red, brown towards the tips; veins pale. Length of the body 6—8 lines; of the wings 18—22 lines.

a. Malabar Coast. Presented by T. Ward, Esq.

b. North India. From Mr. Warwick's collection.

## 3. POLYDICTYA? PUNCTATA.

*Lystra punctata*, Signoret, *Ann. Soc. Ent. Fr.* 2me Série, viii. pl. 2, 1.

## Genus 12. POIOCERA.

*Poiocera*, De Laporte, *Ann. Soc. Ent. Fr.* i. 221.

*Cicada*, Fabr.

*Lystra*, Fabr., Germar, Perty, Guérin, Westwood.

*Fulgora*, Olivier.

*Pæocera*, Burmeister, Amyot et Serrille, Schaum.

*Cladodipteryx?* Westwood.

## 1. POIOCERA FLAVOPUNCTATA.

*Pæocera flavopunctata*, *Spin. Ann. Soc. Ent. Fr.* viii. 279, 4.

*Lystra flavopunctata*, *Perty, Del. An. Art.* 176, pl. 35, f. 4.

In this species the fore-wings are much longer than the hind-wings.

*a.* Brazil.

*b, c.* Venezuela. From Mr. Dyson's collection.

## 2. POIOCERA PERSPICILLATA.

*Pæocera perspicillata*, *Burm. Handb. Ent.* ii. 2, 165, 1. *Blanch.*

*Hist. Nat. Ins.* iii. 171. *Hém. Pl.* 13, f. 1. *Amyot et Serv.*

*Hist. Nat. Ins. Hém.* 500, 1.

*Poiocera perspicillata*, *Spin. Ann. Soc. Ent. Fr.* viii. 277, 1.

*Lystra perspicillata*, *Fabr. Syst. Rhyn.* 59, 13, 2. *Stoll, Cic.* 19,

pl. 1, f. 5. *Germ. Mag. Ent.* iii. 227, 2. *Thon, Arch.* ii. 2, 55, 27.

*L. luctuosa?* *Guér. Voy. de la Coquille*, 188.

*Cicada perspicillata*, *Fabr. Sp. Ins.* ii. 322, 1. *Mant. Ins.* ii. 268,

1. *Ent. Syst.* iv. 27, 1. *Gmel. Ed. Syst. Nat.* i. 4, 2104, 115.

*C. atrata*, *Fabr. Ent. Syst.* iv. 31, 19.

*Fulgora perspicillata*, *Oliv. Enc. Méth.* vi. 574, 34.

In this, and most of the following species, the fore-wings are not much longer than the hind-wings.

*a—e.* Brazil.

## 3. POIOCERA OBSCURA, MSS.

*Poiocera obscura*, var. *perspicillata?* MSS.

*a.* ———? Presented by J. G. Children, Esq.

## 4. POIOCERA MACULATA.

*Poiocera maculata*, *Spin. Ann. Soc. Ent. Fr.* viii. 278, 2.

*Pæocera maculata*, *Amyot et Serv. Hist. Nat. Hém.* 500, 2.

*Lystra maculata*, *Guér. Voy. de la Coquille*, 187.

*a.* Brazil. Presented by John Miers, Esq.

*b, c.* Brazil.

## 5. POIOCERA PALLIDA.

Poiocera pallida, *Spin. An. Soc. Ent. Fr.* viii. 279, 3.

Lystra pallida, *Guér. Voy. de la Coquille*, 188.

Brazil.

## 6. POIOCERA LUCZOTI.

Poiocera Luczoti, *De Lap. Ann. Soc. Ent. Fr.* i. 222, pl. 6, f.

1. *Spin. Ann. Soc. Ent. Fr.* viii. 279, 5.

Bahia.

## 7. POIOCERA SERVILLEI.

Poiocera Servillei, *Spin. Ann. Soc. Ent. Fr.* viii. 280, 6.

Lystra Servillei, *Guér. Voy. Coquille, Ins.* 187, pl. 10, f. 8.

a. Brazil. Presented by John Miers, Esq.

b. Brazil.

## 8. POIOCERA PICTA.

Lystra picta, *Germar.*

Brazil.

## 9. POIOCERA SPILOTA.

Lystra spilota, *Germar.*

Brazil.

## 10. POIOCERA LEPIDA.

Poiocera lepida, *Spin. Ann. Soc. Ent. Fr.* viii. 281, 7.

Brazil.

## 11. POIOCERA DIANÆ.

Lystra Dianæ, *Germ.*

Brazil.

## 12. POIOCERA CONSPERSA.

Lystra conspersa, *Germar.*

Brazil.

## 13. POIOCERA FLAVIVENTRIS.

*Lystra flaviventris*, *Germar.*

Brazil.

## 14. POIOCERA TIBIALIS.

*Lystra tibialis*, *Germar.*

*Calypso proctus heteroscelis*? *Spinola.*

Brazil.

## 15. POIOCERA DICHROA.

*Lystra dichroa*, *Germ.*

Brazil.

## 16. POIOCERA TURCA.

*Cicada turca*, *Fabr. Ent. Syst.* iv, 40, 56.

*Flata turca*, *Fabr. Syst. Rhyn.* 51, 26.

*Lystra turca*, *Germ.*

Brazil.

## 17. POIOCERA SPECULARIS.

*Lystra specularis*, *Germ. Stoll, Cic.* 87, pl. 23, f. 123.

Surinam.

## 18. POIOCERA? COCCINEA.

*Fulgora coccinea*, *Oliv. Enc. Méth.* vi. 565, 574, 38. *Stoll, Cic.*  
119, pl. 29, f. 172.

*Lystra coccinea*, *Germar.*

Cape.?

## 19. POIOCERA VENOSA.

*Lystra venosa*, *Germar.*

Brazil.



## 20. POIOCERA MINIACEA.

*Lystra miniacea*, *German.*  
Brazil.

## 21. POIOCERA COMBUSTA.

*Lystra combusta*, *Westw. Arc. Ent.* pl. 71, f. 2.  
*a.* Venezuela. From Mr. Dyson's collection.

## 22. POIOCERA ARROSA.

*Poocera arrosa*, *Blanch. Voy. d'Orb.* pl. 31, f. 1.  
Bolivia.

## 23. POIOCERA OLIVACEA.

*Poocera olivacea*, *Blanch. Voy. d'Orb.* pl. 31, f. 2.  
Bolivia.

## 24. POIOCERA PORPHYREA.

*Poiocera porphyrea*, *Erichson, Schomb. Reisen.* 111, p. 14.  
British Guiana.

## 25. POIOCERA? LIMBATA.

*Fulgora limbata*, *Oliv. Enc. Méth.* vi. *Stoll, Cic.* pl. 29, f. 119, 171  
Cape.

## 26. POIOCERA? FULIGINOSA.

*Fulgora fuliginosa*, *Oliv. Enc. Méth.* vi.  
*Lystra fuliginosa*, *German.*  
North America.

## 27. POIOCERA UNDATA, F'cm.

*Nigra, ferrugineo varia; abdomen apice rufum, subtus fulvum; opercula fulva; pedes nigri; femora ferrugineo vittata; alæ anticæ viridi-nigræ, apice fuscæ, fascia undata flava ornate; alæ posticæ nigræ, albo maculate et fasciatae.*

Body black: crown of the head short and broad, surrounded by a ferruginous ridge; face rather rugulose, surrounded by a slight ridge, and having three ridges in its disk, the side pair oblique and waved: mouth extending far beyond the hind hips: eyes prominent: shield of the chest with a ferruginous ridge which sends forth a branch along a suture to each side, where it widens into a large ferruginous spot; the ridge is continued along the scutcheon, which has an undulating ferruginous ridge on each side of its disk, and the ridges of its border are partly ferruginous: hind-chest black, ridged across: abdomen black, short-elliptical, a little longer and broader than the chest, bright red towards the tip, tawny beneath; opercula tawny: legs black, furrowed: a ferruginous stripe beneath each thigh; hind-shanks armed with spines: wings partly red at the base: fore-wings greenish black, brown at the tips, adorned with a yellow, undulating band; veins ferruginous, greenish tawny towards the tips, much reticulated along the whole length; cross-veins bright green, bordered with white: hind wings black, with two white spots near the base, and with a very broad white band near the tip which is brown; veins black. Length of the body 7 lines; of the wings 22 lines.

a. Columbia. From Mr. Turner's collection.

## 28. POIOCERA MULTIFARIA, Mas.

*Fulva; scutelli latera nigro quadrimaculata; abdominis latera fulva albo-guttata; pedes fulvi, tibiæ anteriores nigro maculatæ; alæ anticæ fuscæ viridi maculate apice fulvæ; alæ posticæ nigro-fuscæ macula limpida subapicali ornatae.*

Body tawny, slightly shining, finely rugulose: head nearly as broad as the chest, its breadth more than twice its length; crown short, slightly curved, surrounded by a ridge; front broad, short, flat, thinly clothed with short tawny hairs, angular on each side; face with two indistinct longitudinal ridges, and with a more distinct transverse ridge near the epistoma: mouth tawny with a black tip, reaching a little beyond the hind hips: fore-chest curved, tinged with green and brown, having a slight transverse depression on each side near the fore border: scutcheon of the middle-chest

depressed, pointed, adorned on each side with four black spots: abdomen black, slightly keeled above, a little broader, but hardly longer than the chest, adorned with a very broad luteous stripe on each side from half the length to the tip; a slender luteous stripe along the dorsal keel; a row of black spots along each side; hind borders of the segments tawny: legs tawny, furrowed; knees mostly green; anterior shanks with black spots; hind-shanks armed with spines: wings bright red at the base: fore wings pale brown, adorned for two-thirds of the length from the base with numerous green dots, and along the fore border with green spots, tawny, with a reddish band, and with paler spots towards the tip; veins mostly tawny: hind-wings very dark brown, grayish along the hind border, adorned with a large colourless spot near the tip; veins black. Length of the body  $8\frac{1}{2}$  lines; of the wings 22 lines.

a. ———? From Mr. Shuckard's collection.

## 29. POIOCERA SATELLITIA, Mas.

*Fulvo-viridis; metathorax niger; abdomen rufum; opercula fulva; pedes nigro-fusci, viridi vittati, tibiis, tarsisque posticis ferrugineis; alæ anticæ virides, flavo maculatæ, apice viridi, flavæ subhyalinæ nigro quinque-maculatæ; alæ posticæ nigrae fascia arcuata alba ornata.*

Body green, mingled with tawny, transversely rugulose: crown of the head very short; face divided by a distinct suture from the epistoma: mouth ferruginous, extending to half the distance between the hind-hips and the tip of the abdomen: shield of the chest with a longitudinal ridge which is forked towards the fore border and unites with the transverse wrinkles: three ridges on the scutcheon, the side pair waved: hind-chest black, ridged across: abdomen obconical, bright red, a little longer than the chest, black at the base and on each side of a deep longitudinal ridge; opercula tawny: legs blackish-brown, furrowed, slightly streaked with green; hind-shanks and hind-feet ferruginous; hind-shanks armed with spines: fore-wings green, adorned with numerous yellow spots and dots; reticulated part very pale greenish-yellow, almost transparent, adorned with five black spots; veins yellow and green: hind-wings black, brown towards the tips, adorned with a curved white band, which does not reach the hind border; veins black, bluish-green towards the base and on some parts of the hind border. Length of the body 7 lines; of the wings 19 lines.

a, b. Venezuela. From Mr. Dyson's collection.

c. ———?

## 30. POIOCERA BASISTELLA, Fem.

*Viridi-ferruginea; metathorax piceus; abdomen piceum; subtus fulvum, apice luteum; pedes fulvi, viridi et fusco varii; alae anticae fuscae, flavo maculatae, basi et ad costam virides; alae posticae nigro-fuscae.*

Body ferruginous, slightly shining, finely rugulose, tinged with dull dark green: head much narrower than the chest: its breadth more than twice its length: crown short, slightly curved, surrounded by a ridge; front flat, very rugulose, with three ridges, the side pair curved and oblique; epistoma slightly keeled: mouth tawny, extending far beyond the hind-hips: fore-chest widened in front, angular on each side, with a short ridge along the middle: scutcheon of the middle-chest bordered with a slight ridge, which is most distinct on each side of the angle at the tip; three ridges on the disk, the side pair curved: hind-chest pitchy: abdomen pitchy, nearly linear, tawny beneath, luteous towards the tip, a little broader but hardly longer than the chest: legs tawny, furrowed, tinged with green and brown; feet mostly brown; hind-shanks armed with spines: forewings dark brown, green at the base and along two-thirds of the fore border, adorned in the disk with yellow dots, and towards the base with yellow spots which are partly confluent: veins tawny, green or yellow where the wings are so coloured, white in the disk beyond the middle: hind-wings dark brown, blackish-brown towards the base; veins black. Length of the body 6—8 lines; of the wings 20—23 lines.

*a, b.* Jamaica. From Mr. Gosse's collection.

*c, d.* ——— ?

## 31. POIOCERA DIVISA, Mas.

*Fulva, nigro maculata et fasciata; metathoracis latera rufa; abdomen rufum, maculis nigris quadrivittatum, subtus flavum; pedes flavi nigro vittati; alae limpidae, basi rufae, apice subfuscae, alae anticae nigro fasciatae.*

Body tawny, finely rugulose; head much narrower than the chest; crown very short, somewhat concave, surrounded by a ridge, with a narrow black band in its disk; face adorned with a black band between the eyes and with many black spots, and having three longitudinal ridges, of which the side pair converge slightly towards the fore border; the latter is somewhat concave; a black band on the distinct suture between the face and the epistoma, the latter has two irregular brown stripes; mouth tawny; extending a little beyond

the hind-hips : shield of the chest adorned with numerous black spots, surrounded by a ridge, and divided by a longitudinal ridge into two compartments; scutcheon spotted with black, having two curved oblique ridges, which unite on the fore border and form a semicircle : sides of the hind-chest bright red : abdomen short-elliptical, bright red, a little longer and broader than the chest, blackish at the base, and having four rows of blackish spots, and near the tip two large black spots; underside yellow : legs yellow, furrowed, striped with black; knees bright red; tips of the feet black; hind-shanks armed with spines : fore-wings bright red for full two-thirds of the length from the base, colourless from thence to the tips, which are slightly tinged with brown; a slender curved black band divides the fore part of the red from the colourless region; longitudinal veins black, strongly marked, including numerous dull green irregular cross-veins; veins of the colourless part bright green, distinct and regular : hind-wings colourless, tinged with pale brown at the tips, bright red towards the base, blackish about the hind angle of the base and on some part of the adjoining hind border; veins ferruginous, here and there blackish. Length of the body 5—6 lines; of the wings 14—16 lines.

a, b. ——— ?

-? From Mr. Shuckard's collection.

### 32. POIOCERA VENOSA, Mas.

*Fusca, fulvo guttata; metathorax niger; abdomen rufum, maculis nigris quadrivittatum; pedes nigri fulvo maculati; alæ anticae fuscae, albido maculatae, alæ posticae cinerae, basi fusco cyaneoque maculatae.*

Body brown, finely rugulose, adorned with numerous tawny dots : crown of the head very short, surrounded by a ridge which is tawny on the hind border, yellow on the fore border, the latter is slightly convex; face parted by a distinct suture from the epistoma, having three ridges, the side pair are oblique and very indistinct : mouth black, reaching the hind-hips : shield of the chest with a broad but indistinct cross furrow, and a slight longitudinal ridge, which is continued on the scutcheon : hind-chest black with ferruginous transverse ridges : abdomen slightly obconical, not longer than the chest, brilliant red, adorned with four rows of black spots, black at the base and beneath : legs black, furrowed, adorned with yellow spots and with numerous yellow dots; hind-shanks armed with spines; hind-feet brown with black tips : fore-wings brown with numerous dingy white spots; longitudinal veins ferruginous; cross-

veins very numerous, tawny and irregular for two-thirds of the length from the base, yellow and regular from thence to the tips: hind-wings pale gray, dark brown for more than one-third of the length from the base, brown at the tip; a blue spot on each near the base; veins dark brown. Length of the body  $4\frac{1}{2}$  lines; of the wings 14 lines.

### 33. POIOCERA RUFIFASCIA, Mas.

*Nigra; caput et mesothorax flavo-fusca; abdomen nigro vittatum et fasciatum, lateribus ventreeque flavum; pedes nigri; tibiæ flavo bifasciatæ; alæ fusæ; alæ anticæ rubro fasciatæ, basi subferrugineæ; alæ posticæ apices versus limpidæ.*

Body black: head and middle-chest brown, somewhat tawny along the borders: crown of the head surrounded by a ridge, and having a small tubercle on each side of the disk; face rather rugulose, divided by a slight transverse ridge from the epistoma: mouth dark brown, extending far beyond the hind-hips: middle-chest somewhat rugulose: hind-chest black, ridged transversely and obliquely: abdomen slightly obconical, broader but not longer than the thorax, yellow above, and on each side beneath; a longitudinal ridge, and the hind border of each segment black: legs black, furrowed: two yellow bands on each shank; hind-shanks armed with spines; fore-wings brown, somewhat ferruginous and having green veins towards the base, adorned with a slender crimson band, beyond which is the reticulated part where the veins are brown: hind-wings dark brown, adorned with sea-green or whitish veins, colourless towards the tips whose borders are pale brown. Length of the body 5 lines; of the wings 15 lines.

a. Columbia. From Mr. Turner's collection.

### 34. POIOCERA RUBRIVITTA, Mas.

*Nigro-fusca; scutelli latera ferruginea; abdomen vittis duabus rufis nigro-maculatis ornatum; pedes nigri; alæ anticæ nigre fulvo maculatæ, basi rufæ; alæ posticæ fusæ, basi rufæ, apice limpidæ.*

Body blackish-brown, finely rugulose: crown of the head very short, surrounded by a ridge; face parted from the epistoma by a distinct suture, having an indistinct longitudinal ridge: mouth black, extending nearly to the tip of the abdomen: an indistinct longitudinal ridge on the shield; scutcheon ferruginous on each

side; hind-chest black with transverse ridges, which are partly ferruginous or red: abdomen black, nearly square, a little broader but not longer than the chest, adorned along each side with a very brilliant red stripe, and with a row of black spots which are more or less confluent with the black disk: legs black, furrowed: wings red at the base: fore-wings black, adorned with numerous tawny spots; those towards the tips are nearly colourless: veins tawny, paler towards the tips: hind-wings dark brown for half the length from the base, colourless from thence to the tips; veins black. Length of the body 4 lines; of the wings 12 lines.

### 35. POIOCERA BIMACULA, Mas.

*Fulva; metathorax piceus; abdomen piceum, subtus et apice fulvum; pedes fulvi; tibiæ antice nigro maculatæ; alæ anticæ ferruginæ, maculis duabus flavis ad costam ornate; apice fulvæ; alæ posticæ fuscæ, apice sublimpidæ.*

Body tawny, finely rugulose, slightly shining: head much narrower than the chest; its breadth more than twice its length; crown short, surrounded by a ridge; front flat, very rugulose, with three ridges, the side pair curved and oblique; epistoma slightly ridged: mouth tawny, extending far beyond the hind-hips: fore-chest with a ridge along the middle, widened in front, very angular on each side: scutcheon of the middle-chest with three ridges, the side pair nearly semicircular: hind-chest pitchy: abdomen pitchy, nearly obconical, tawny at the tip and beneath: legs tawny, furrowed; feet partly black: fore-shanks spotted with black; hind-shanks armed with spines: fore-wings ferruginous, dull tawny towards the tips, with two round pale yellow spots on the fore border; a few indistinct white dots in the disk; veins tawny: hind-wings brown from the base to a little beyond the middle, nearly colourless from thence to the tips: veins black. Length of the body 6 lines; of the wings 21 lines.

### 36. POIOCERA SEMILIMPIDA, Mas et Fem.

*Fulva; caput nigro trimaculatum et unifasciatum; mesothoracis scutellum nigro octomaculatum; abdomen subtus basi luteum; pedes fulvi; alæ limpidæ, basi rufæ; alæ anticæ dimidio nigra, flavo bimaculatæ et unifasciatæ.*

Body tawny, dull, very finely rugulose: head very little narrower than the chest, its breadth more than twice its length; crown

very short, surrounded by a ridge; front flat, slightly shining, with a black interrupted band near the crown, with a black spot on each side, and with one longitudinal and two diagonal ridges, the latter intersect each other in the middle; a black spot at the base of the epistoma which is slightly ridged: mouth tawny, extending a little beyond the hind-hips; fore-chest widened in front, angular on each side, adorned with four black spots, the inner pair much larger than the outer pair: scutcheon of the middle-chest nearly triangular, adorned with two large black spots, and on each side with three small black spots: two black spots on each side of the breast; side-plates yellow: abdomen obconical, a little longer and broader than the chest, luteous beneath towards the base: legs tawny, furrowed; hind-shanks armed with spines: fore-wings nearly colourless, black for near half the length from the base which is red; a yellow band on the black part has a yellow spot on each side: hind-wings black, red at the base; veins green, black in the colourless part. Length of the body 6 lines; of the wings 16 lines.

*a, b.* Para. From Mr. Stevens' collection.

### 37. *POIOGERA LIMPIDA*, Mas.

*Fulea; caput nigro maculatum et subtus reticulatum; scutelli discus niger; abdomen fasciis viridibus et nigris ornatum, subtus nigro maculatum; pedes fulvi nigro maculati; alæ limpidae.*

Body tawny, slightly shining, almost smooth: head a little narrower than the chest; its breadth more than twice its length; crown very short, surrounded by a ridge, with a transverse brown spot on each side; front flat, traversed by a black band; face and epistoma reticulated with black: mouth tawny, extending to the hind-hips; fore-chest mostly yellow, convex in front, slightly concave behind, adorned with black ringlets, which are partly connected together and interrupted: a large irregularly elliptical black spot on the scutcheon of the middle-chest sends forth a short branch on each side in front, where it is divided by a slender tawny stripe; on each side of it are some ferruginous and black marks: abdomen obconical, a little longer than the chest, adorned with slender green and black bands along the hind borders of the segments; underside spotted with black: legs tawny, furrowed, spotted with black: hind-shanks armed with spines: wings colourless; brands black, nearly triangular; veins with tawny, green and black bands, the latter colour prevailing chiefly on the cross-veins which are partly clouded with brown. Length of the body 5 lines; of the wings 14 lines.

*a.* Para. From Mr. Stevens' collection.



## 38. POIOCERA OBLIQUA, Fem.

*Cladodypteryx obliquata?* Westw. Arc. Ent. 90, pl. 71, f. 3.

*Ferruginea*; caput subtus nigrum, flavo fasciatum; pectoris latera flava; pedes ferruginei; alæ limpidae; alæ anticae nigro bimaculatæ et unifasciatæ; venæ apice setosæ; venæ transversæ nigro nebulosæ.

\* Body ferruginous, dull, somewhat granulated: head much narrower than the chest; crown narrow, surrounded by an indistinct ridge; front square, flat, black; face yellow; epistoma pitchy, with a ferruginous border: mouth tawny with a black tip, extending to the hind-hips: eyes rather large, like those of *Cladodiptera*, to which genus this and the neighbouring species are somewhat related: fore-chest slightly convex in front, very slightly concave behind: scutcheon of the middle-chest with three indistinct ridges; the side pair slightly curved: sides of the breast pale yellow, forming a continuous band with the face: abdomen obconical, a little longer than the chest: legs ferruginous, furrowed; fore-thighs and fore-shanks somewhat widened; hind-shanks armed with black spines: wings colourless; fore-wings adorned with three black marks; the first a small spot on the hind border near the base; the second an oblique band, widening from the hind border; veins black, ferruginous towards the base, feathered with bristles towards the tips; cross-veins clouded with black. Length of the body  $5\frac{1}{2}$  lines; of the wings 16 lines.

*a, b.* Para. From Mr. Stevens' collection.

## 39. POIOCERA SETIFERA, Mas.

*Flava, viridi varia*, thorax nigro quadrivittatus; abdomen supra viride, nigro fasciatum et bivittatum; pedes flavi, viridi et nigro varii; alæ limpidae, angustæ; venæ transversæ fusco subnebulosæ.

Body pale yellow, tinged with green, nearly smooth, slightly shining: head nearly as broad as the chest; crown short, surrounded by a slight ridge, a black band along its hind border: front flat, quadrate, with a black stripe supported by a broad black band, both somewhat excavated; disk of the face black with a red border: mouth yellow: eyes rather prominent: fore-chest convex in front, hardly concave along the hind border, adorned with four black stripes; the inner pair parallel, approximate, slightly widening towards the hind border, their outer sides slightly excavated; the outer pair curved, somewhat interrupted: scutcheon of the middle-chest adorned with

four black stripes; the inner pair parallel, almost contiguous; the outer pair much interrupted; hind border mostly black: abdomen obconical, green, much longer than the chest, tawny beneath; a broad black stripe along each side; hind borders of the segments black: legs yellow tinged with pale green, slender, rather long, slightly furrowed, thinly clothed with short hairs; fore legs black; fore-thighs and fore-shanks rather broad; a broad black band near the tip of each posterior thigh; middle-feet and tips of middle-shanks black; spines of hind-shanks stout, tawny, with black tips: wings colourless, long and narrow; a stout vein along the whole border; brand small, brown; veins tawny, partly green or black, beset with bristles; cross-veins stout, black, slightly tinged with brown. Length of the body 5 lines; of the wings 14 lines.

*a. Para.* From Mr. Stevens' collection.

### Sub-Tribe 3. DYCTIOPHOROIDES.

Dyctiophoroides, *Spinola, Ann. Soc. Ent. Fr.* viii. 202, 283.

Pseudophanides, *Amyot et Serville* (ad partem).

Flatides, *Amyot et Serville* (ad partem).

### Genus 1. PLEGMATOPTERA.

Plegmatoptera, *Spinola, Ann. Soc. Ent. Fr.* viii. 283.

Plegmatoptera prasina, *Spin. Ann. Soc. Ent. Fr.* viii. 286.

South America.

### Genus 2. DICHOPTERA.

Dichoptera, *Spinola, Ann. Soc. Ent. Fr.* viii. 286.

Fulgora, *Fabr., Olivier, Gmelin, Donovan.*

Flata, *Germar.*

Dictyophora, *Germar.*

Pseudophana, *Burmeister.*

#### 1. DICHOPTERA HYALINATA.

Dichoptera hyalinata, *Spin. Ann. Soc. Ent. Fr.* viii. 283, pl. 13, f. 5.

Flata hyalinata, *Germ. Mag. Ent.* iii. 190, 4. *Thom, Arch.* ii. 247, 18.

Dictyophora hyalinata, *Germ. Silb. Rev. Ent.* i. 175.

Pseudophana hyalinata, *Burm. Handb. Ent.* ii. 1, 160, 1.

Fulgora hyalinata, *Fabr. Sp. Ins.* ii. 315, 14. *Mant. Ins.* ii. 261, 18. *Ent. Syst.* iv. 5, 16. *Syst. Rhyn.* 4, 16. *Oliv. Enc.* vi. 572, 15. *Donov. Ins. Ind. Hemipt.* pl. 1, f. 3.

*Fulgora hyalina*, *Gmel. Ed. Syst. Nat. i. 4, 2091, 17.*

a, b. Silhet. From the Rev. J. Stainforth's collection.

c. ———?

d. India. From Mr. Sowerby's collection.

## 2. DICOPTERA SMARAGDINA, Mas.

*Ferruginea, nigro varia; metathorax viridis; abdomen viride, nigro fasciatum; pedes fulvi, nigro maculati; femora rufoguttata; alae anticae ferruginæ, fusco maculatæ, apice limpidae fusco variæ; alae posticae limpidae, basi virides, apice subfusca.*

Body greenish-tawny, covered with red dots, many of which are confluent, and give the head and chest a ferruginous hue: head about half the breadth of the chest; crown small, having on each side adjoining the eye a lofty ridge, which forms an upright plate, the fore part of its side borders is black; disk of the crown divided into two compartments by a ridge which is forked towards the fore border, each compartment contains three black spots; protuberance of the head conical, curved upward, slightly furrowed, a little longer than the crown, spotted with black; face large, scutcheon-shaped, with a rim round the border, and two nearly parallel ridges in the disk; face shield-shaped, with a rim round its border, some pitchy marks on its disk; epistoma small, narrow, keeled, partly pitchy: mouth tawny with a black tip, extending near to the tip of the abdomen: fore-chest large, straight along the hind border, much widened in front; a slight ridge along the middle divides a short black stripe towards the fore border; a ridge runs nearly parallel to each side, on which is a black spot adjoining each eye: disk of the scutcheon of the middle-chest occupied by a cruciform black mark, which is irregular and much excavated, and its disk is mostly tawny; hind-chest bright green; abdomen bright emerald-green, obconical, a little longer than the chest; hind borders of the segments with black bands, increasing in breadth towards the tip, their fore borders are irregular; tip of the abdomen black, hairy: legs tawny, furrowed, spotted with black; thighs dotted with red; anterior feet black; hind-shanks armed with black-tipped spines: fore-wings ferruginous with brown marks for near half the length from the base, colourless from thence to the tips, about which there are many small brown marks, some of which are confluent; veins brown, tawny towards the base: hind-wings colourless, bright emerald-green at the base, slightly tinged with brown at the tips, and on the hind border near the base; veins black, green towards the base. Length of the body 7 lines; of the wings 22 lines.

a. Venezuela. From Mr. Dyson's collection.

## 3. DICHOPTERA TESSELLATA, Fem.

*Fulva, fusco varia; caput cornu incurvum fignens; pedes fulvi, femora rufo guttata, tibiæ fusco cinctæ, tarsi ferruginei; alæ limpide fusco variæ.*

Body tawny mottled with brown: head about half the breadth of the chest; crown narrow; its disk mostly black with the exception of a tawny stripe; an upright ridge forms a nearly right angle on each side; protuberance full thrice the length of the crown, furrowed, curved upward, sickle-shaped, varied with brown, having a deep notch above at one-third of its length; front, face, and epistoma narrow, ridged: mouth tawny, extending far beyond the hind-hips: eyes prominent: fore-chest widened in front, slightly concave on the hind border, with a ridge along the middle, and with two ridges and a few tubercles on each side: two slight parallel ridges on the scutcheon of the middle-chest: abdomen obconical, a little longer than the chest: legs tawny, pubescent; thighs adorned with red dots; shanks with brown bands; feet ferruginous; spines of the hind-shanks with black tips: wings slightly tinged with tawny; fore-wings adorned with numerous irregular brown marks; veins bristly, brown tawny or pale yellow; cross-veins regular and very numerous along the whole length of the wing. Length of the body 8 lines; of the wings 18 lines.

a. Para. From Mr. Stevens' collection.

## 4. DICHOPTERA FERRUGINEA, Fem.

*Fulva, fusco et nigro maculata; caput prothorace vix duplò longius: abdomen fulvo-viride, thorace paulò longius, subtus apice nigrum; segmentorum margines postici fuscii; pedes fulvi, tibiis apice tarsisque fuscis; alæ limpide, antica apice sub-fusca; stigma rufum.*

Body tawny with brown spots: head short, its length in front of the eyes somewhat less than that between them; two brown spots in the disk of the crown, which has on each side an upright convex ridge, the edge of the latter is black, and it forms an obtuse angle near its tip, where it is elevated; sides in front of the eyes yellow, a black spot on each, and between them, at the tip of the under side, a larger triangular black spot; from the latter two parallel red ridges proceed along the whole length of the front, which is yellow, and widens towards the epistoma, its borders are also red; the epistoma is yellow, and has a tawny middle ridge, and a brown stripe along

half the length of each side, its tip is also brown: mouth tawny with a brown tip reaching the hind-hips: fore-chest almost conical in front, slightly concave along the hind border, surrounded by a brown border; on each side is a small brown spot near a brown ridge which is parallel to the border: the borders of the shield of the middle-chest are mostly brown, and on each side of its disk it has a brown stripe, which accompanies a slight ridge, and is forked near the fore border, where there is a brown spot in front of it; two irregular brown spots between it and each side: abdomen obconical, partly green, a little longer than the chest; hind borders of the segments brown; tip compressed, black beneath: legs tawny, slightly grooved; knees, feet and tips of the shanks mostly brown; hind-shanks armed with five black-tipped spines; hind-feet less widened than in most species of the genus: wings slightly tinged with tawny, which prevails most on the fore-wings whose tips are brownish; brand red, occupying five areolets; veins of the fore-wings brown, tawny at the base; of the hind-wings black. Length of the body  $4\frac{1}{2}$  lines; of the wings 12 lines.

a. Para. From Mr. Stevens' collection.

#### 5. DICOPTERA HERBIDA, Mas.

*Viridis, sublinearis; caput subtus fusco bimaculatum; mesothorax flavo-viridis; abdomen thorace multò longius, basi subluteum; pedes virides; alæ limpidae.*

Body green, nearly linear: no protuberance on the head, which is broader than long; crown not ridged; front contracted in the middle and again widening towards the epistoma, with three ridges; the side pair tawny, with two brown spots between the eyes: mouth green with a black tip, reaching the hind-hips: fore-chest short, convex in front, concave and slightly notched on the hind border; the ridges indistinct: middle-chest partly yellow; its ridges distinct: abdomen slightly tapering towards the tip, much longer than the chest, with a pale luteous tinge towards the base: legs green; hind-shanks armed with four black-tipped spines; hind-feet hardly widened: wings colourless; brand green, occupying three or four areolets; veins green, black towards the tips. Length of the body 4 lines; of the wings 12 lines.

a. Venezuela. From Mr. Dyson's collection.

## Genus 3. LAPPIDA.

Lappida, *Amyot et Serv. Hist. Nat. Hém.* 505, 393.

## 1. LAPPIDA PROBOSCIDEA.

Lappida proboscidea, *Amyot et Serv. Hist. Nat. Hém.* 505, 1.

Dyctiophora proboscidea, *Spin. Ann. Soc. Ent. Fr.* viii. 292, 1. pl. 13, f. 4.

a. Brazil. ? From Mr. Stevens' collection.

## Genus 4. DYCTIOPHORA.

Dyctiophora, *Germ. Silb. Rev. Ent.* i. 165.

Fulgora, *Linn., Fabr., Gmel., Panz., Sulz., Schulz., Oliv., Vill., Tign., Léon-Duf., Petagna, Costa.*

Flata, *Germar.*

Pseudophana, *Burmeister, Amyot et Serville.*

## 1. DICTYOPHORA EUROPÆA.

Dictyophora europæa, *Germ. Silb. Rev. Ent.* i. 165. *Spin. Ann. Soc. Ent. Fr.* viii. 298, 5.

Pseudophana europæa, *Burm. Handb. Ent.* ii. 1, 160, 2. *Amyot et Serv. Hist. Nat. Hém.* 506, 1.

Fulgora europæa, *Linn. Syst. Nat.* i. 2, 704, 9. *Fabr. Sp. Ins.* ii. 315, 15. *Mant. Ins.* ii. 261, 19. *Ent. Syst.* iv. 6, 19. *Syst. Rhyn.* 5, 21. *Panz. Faun. Germ.* 2016. *Sulz. Hist. Ins.* pl. 9, f. 5. *Schulz. Naturf.* 9, pl. 2. *Stoll, Cic.* 48, 1, pl. 11, f. 51. *Gmel. Ed. Syst. Nat.* i. 3, 2091, 9. *Oliv. Enc.* vi. 572, 28, pl. 109, f. 4, 2, 3. *Vill. Ent. Linn.* i. 454, 1, pl. 3, f. 10. *Panz. Faun. Germ.* 20, 16. *Tign. Hist. Nat. Ins.* iv. 111, *Léon-Duf. Rech. Hém.* 94. *Petagna, Ins. Ent.* ii. 616, pl. 9, f. 1. *Costa, Fauna del Regno di Napoli, Insetti Emitteri.*

Flata europæa, *Germ. Mag. Ent.* iii. 190, 3. *Thon, Arch.* ii. 47, 12.

Pseudophana, *Amyot, Ann. Soc. Ent. Fr.* 2me. Série v. 160, 381. *Fulgora*, 1, 1.

a. Germany.

b—f. South France.

g—i. Italy.

## 2. DICTYOPHORA HEMIPTERA.

*Fulgora hemiptera*, *Costa, Fauna del Regno di Napoli, Ins. Em. Fulg.* 2, 2.

Naples.

## 3. DICTYOPHORA ELEGANS.

*Fulgora elegans*, *Costa, Annual. Zool.* 1834, 12. *Fauna del Regno di Napoli, Ins. Em. Fulg.* 2, 3. pl. 2, f. 1a. A.

Naples.

## 4. DICTYOPHORA CYRNEA.

*Dictyophora cyrnea*, *Spin. Ann. Soc. Ent. Fr.* viii. 294, 2.

## 5. DICTYOPHORA SENEGALENSIS.

*Dictyophora Senegalensis*, *Spin. Ann. Soc. Ent. Fr.* viii. 295, 3.  
Senegal.

## 6. DICTYOPHORA PANNONICA.

*Dictyophora pannonica*, *Herr. Schæff. Faun.* 13, 1. *Spin. Ann. Soc. Ent. Fr.* viii. 297, 4.

*Flata pannonica*, *Creutzer, Germar, Thon, Arch.* ii. 2, 47.

*Pseudophana pannonica*, *Amyot et Serr. Hist. Nat. Hém.* 507, 2.

*Chanithus*, *Amyot, Ann. Soc. Ent. Fr. 2me Série*, v. 160, 380.

East Europe.

## 7. DICTYOPHORA AFFINIS.

*Dictyophora affinis*, *Spin. Ann. Soc. Ent. Fr.* viii. 299, 6.

South America.

## 8. DICTYOPHORA VIRESCENS.

*Dictyophora virescens*, *Germ. Spin. Ann. Soc. Ent. Fr.* viii. 300, 7.

*Fulgora virescens*, *Fabr. Syst. Rhyn.* 4, 15. *Stoll, Cic.* 28, pl. 4, f. 18.

*Flata virescens*, *Germ. Thon, Arch.* ii. 2, 47.

South America.

## 9. DICTYOPHORA DISTINGUENDA.

*Dictyophora distinguenda*, *Spin. Ann. Soc. Ent. Fr.* viii. 301, 8.  
South America.

## 10. DICTYOPHORA VIVIDA.

*Dictyophora vivida*, *Germ. Thon, Arch.* ii. 47.  
*Flata vivida*, *Fabr. Ent. Syst. Suppl.* 519, 10.  
*Fulgora vivida*, *Fabr. Syst. Rhyn.* 5, 20. *Stoll, Cic.* 54, pl. 13. f. 64. ?  
*Cicada vivida*, *Fabr. Ent. Syst.* iv. 29, 10.  
*Flata vivida*, *Fabr. Ent. Syst. Suppl.* 519, 10.  
*Fulgora conica*? *Oliv. Enc. Méth.* vi. 571.  
*Pseudophana vivida*, *Burm. Handb. Ent.* ii. 160.  
West Indies.

## 11. DICTYOPHORA NOCTIVIDA.

*Pseudophana noctivida*, *Burm. Handb. Ent.* ii. 1, 160, 3.  
*Fulgora noctivida*, *Linn. Syst. Nat.* i. 2, 705, 4. *Fabr. Sp. Ins.* ii. 314, 6. *Mant. Ins.* ii. 313, 6. *Ent. Syst.* iv. 3, 6. *Syst. Rhyn.* 3, 6. *Gmel. Ed. Syst. Nat.* i. 3, 2090, 5.  
*Cicada conirostris*, *Deger, Ins.* iii. 202, 5, pl. 32, f. 4, 5.  
Bahia, Para.

## 12. DICTYOPHORA GRAMINEA.

*Fulgora graminea*, *Fabr. Syst. Rhyn.* 4, 14.  
*Flata graminea*, *Germ. Thon, Arch.* ii. 2, 47.  
*Pseudophana graminea*, *Burm. Handb. Ent.* ii. 160.  
East India.

## 13. DICTYOPHORA PUNGENS.

*Flata pungens*, *Germ. Thon, Arch.* ii. 2, 47.  
*Pseudophana pungens*, *Burm. Handb. Ent.* ii. 160.

## 14. DICTYOPHORA LYRATA.

*Flata lyrata*, *Germ. Thon, Arch.* ii. 2, 47.  
*Pseudophana lyrata*, *Burm. Handb. Ent.* ii. 160.



## 15. DICTYOPHORA FENESTRATA.

*Fulgora fenestrata*, *Fabr. Sp. Ins.* ii. 315, 14. *Mant. Ins.* ii. 261, 18. *Ent. Syst.* iv. 6, 18. *Syst. Rhyn.* 5, 18. *Gmel. Ed. Syst. Nat.* i. 4, 2091, 19. *Pal. Beauv. Ins.* pl. 19, f. 4.  
*Flata fenestrata*, *Germ. Thon, Arch.* ii. 2, 48.  
 Equatorial Africa.

## 16. DICTYOPHORA? TÆNIA.

*Fulgora tænia*, *Fabr. Syst. Rhyn.* 5, 19.  
 Guinea.

## 17. DICTYOPHORA LINEATA.

*Fulgora lineata*, *Donov. Ins. Ind.* pl. 8, f. 1. *Westw. Trans. Linn. Soc.* xviii. 147, 25.  
*F. pallida*, *G. R. Gray, Griff. An. Kingd. Ins.* 260, pl. 90, f. 2.  
*a.* North Bengal. From Miss Campbell's collection.  
*b, c.* East India.

## 18. DICTYOPHORA PALLIDA.

*Fulgora pallida*, *Donov. Ins. Ind.* pl. 8, f. 2.  
 East India.

## 19. DICTYOPHORA SPLENDENS.

*Flata splendens*, *Wied. Germ. Thon, Arch.* ii. 2, 48.  
 Java.

## 20. DICTYOPHORA INDIANA, Mas.

*Fulva, fusco varia*; *cornu capitis longitudine*; *abdomen fuscum, flavo maculatum*; *pedes fulvi, nigro maculati*; *alæ limpidæ, apice fusce*.

Body pale tawny, nearly smooth, slightly shining, mottled with brown: head not more than half the breadth of the chest: crown small, having a rim round the border and a ridge along the middle, its protuberance short-conical, not exceeding its length between the eyes; front, face, and epistoma narrow with three slight ridges: mouth tawny with a black tip, extending to the hind-hips: fore-chest very convex in front and equally concave behind, with two undulating ridges on each side along the fore border: scutcheon of the middle-chest divided into four compartments by three slight

ridges: hind-chest mottled with brown and yellow: abdomen brown, obconical, a little longer than the chest; each segment adorned with several yellow spots of various size and shape: legs tawny, slender, spotted with black; hind-shanks armed with black spines: wings colourless; brand pale brown, occupying three areolets and extending into one of the submarginal areolets; a large pale brown mark occupies the tip of the wing, and extends irregularly along the hind border: on the hind-wings a very short stripe extends to the tip, which is also tinged with brown; veins tawny. Length of the body 5 lines; of the wings 12 lines.

a. India. From Mr. Sowerby's collection.

## 21. DICTYOPHORA CHLOROCHROMA, Fem.

*Fulva, viridi varia; cornu viride thorace paullò longius, ferrugineo vittatum; pedes fulvi; alæ limpidae; alæ anticæ apice subfusæ.*

Body tawny, smooth, slightly shining: head about half the breadth of the chest: protuberance of the head emerald-green, furrowed, horizontal, a little longer than the chest, nearly linear, slightly widening at the base and at the tip, adorned with three ferruginous stripes; epistoma pale yellow with a ferruginous ridge: mouth tawny with a black tip, extending a little beyond the hind-hips: fore-chest concave along the hind border, very convex in front, emerald-green along the borders and on the two longitudinal ridges of its disk: scutcheon of the middle-chest with two emerald-green parallel ridges: transverse ridges of the hind-chest green: abdomen obconical, longer than the chest, compressed and pointed at the tip, mostly green above towards the tip, darker on the hind border of each segment: legs tawny, tinged with green, slender, furrowed; hind-shanks armed with four black-tipped spines besides those at its tips: wings colourless; tips of fore-wings very pale brown; brand green, occupying three areolets; veins black, green towards the base. Length of the body  $8\frac{1}{2}$  lines; of the wings 16 lines.

a. Honduras. From Mr. Dyson's collection.

## 22. DICTYOPHORA PLATYRHINA, Fem.

*Fulva, fusiformis, viridi vittata; caput prothorace plus triplo longius; abdomen viride, apice compressum; pedes virides; tarsi fulvi; alæ limpidae; alæ anticæ apice subfusæ.*

Body tawny, spindle-shaped, smooth, slightly shining: protuberance of the head near thrice the length of the fore-chest, nearly

prismatic, obtuse at the tip, as broad as the crown, adorned above with three emerald-green stripes, slightly tapering for two-thirds of its length, and thence widening to its tips; underside pale grass-green, slightly concave, with two black ridges inclosing a furrow on each side and in front, where they are most conspicuous, and form two compartments by means of a little tawny ridge between them: fore-chest conical in front, deeply notched on the hind border, adorned with five emerald-green ridges, the inner pair slightly curved, the outer pair very slanting: scutcheon of the middle-chest adorned with three emerald-green ridges; the side pair uniting and forming an acute angle at the tip; a spot of the same colour on each side behind the base of the fore-wing: hind-chest tinged with green: abdomen tapering from the base to the tip, green, slightly mottled, tawny at the base with a dorsal ridge, compressed towards the tip, a little longer than the chest: legs pale green, long and slender, slightly grooved, feet tawny with black tips; hind-shanks armed with three black-tipped spines besides the cluster at the tips; hind-feet with two dilations, the second less than half the length of the first, both at right angles, and armed with rows of little black teeth: wings colourless; tips of the fore-wings slightly tinged with pale brown; brands green, occupying five areolets; veins brown, green or tawny towards the base; middle parts of some of the cross-veins near the tips of the fore-wings slightly clouded with brown. Length of the body  $6\frac{1}{2}$  lines; of the wings 16 lines.

a. ——— ? From Mr. Argent's collection.

### 23. DICTYOPHORA ELLIPTICA, Mas.

*Viridis, elliptica; capitis cornu brevi, subquadratum; tibiæ posticæ spinis sex armatæ; alæ limpidæ.*

Body elliptical, bright grass-green, slightly mottled with paler colour; head much narrower than the chest, a little more than twice the length of the fore-chest, with three longitudinal ridges; the side pair slightly converging; protuberance conical, not longer than broad; front long and narrow with five ridges; three ridges on the epistoma: mouth green with a brown tip, extending just beyond the hind-hips: fore-chest convex in front, deeply notched on the hind border, surrounded by a ridge, and having five ridges on its disk; the inner pair slightly waved; the outer pair near to and parallel with the ridges on each side: three ridges on the scutcheon of the middle-chest, the side pair enclosing a spindle-shaped compartment: hind-chest somewhat wrinkled: abdomen obconical, a little longer than the chest: legs green, slender, slightly grooved; hind-shanks armed with six black-tipped spines; hind-feet widened like

those of *D. platyrhina* : wings colourless ; brand very pale green, almost colourless, occupying five areolets in one wing, six in the other ; veins green. Length of the body  $4\frac{1}{2}$ —5 lines ; of the wings 13—14 lines.

a, b. Sierra Leone. Presented by the Rev. D. F. Morgan.

## 24. DICTYOPHORA FERRIFERA, Fem.

*Ferruginea viridi varia ; capitis cornu prothorace dimidio longius, subascendens ; abdomen subfusiforme, viridi varium, thorace multò longius ; pedes fulco-virides ; alæ limpide.*

Body ferruginous, tinged here and there with green : head hardly half the length of the chest ; crown much longer than broad, with three ridges, the side pair strongly marked, the middle one very shallow : protuberance nearly prismatic, slightly tapering till near the tip, where it is a little widened, somewhat inclined upward, forming an obtuse angle with the crown, which it exceeds by nearly half in length ; tip obtuse ; disks of the sides green ; four ridges on the front and three on the epistoma : mouth tawny : fore-chest conical in front, concave along the hind border, surrounded by a slight ridge ; two little waved oblique ridges on the disk, and one on each side near to and parallel with the borders : three ridges on the scutcheon, the middle one very indistinct : abdomen nearly spindle-shaped, very much longer than the chest : legs slender, tawny, partly green, slightly grooved ; hind-shanks armed with five black-tipped teeth : wings colourless ; a slight tawny tinge on the fore-wings ; brand ferruginous, occupying four areolets ; veins brown, green or tawny towards the base. Length of the body 7 lines ; of the wings 16 lines.

a. ——— ?

## 25. DICTYOPHORA RUFISTIGMA, Mas.

*Ferruginea, viridi et fulvo varia ; capitis cornu nigrum, flavo vittatum, corporis trienti æquale ; abdomen thorace longius, supra piceum, vittis duabus flavo-viridibus ornatum, subtus fulvum ; pedes fulvo-virides ; femora apice viridia ; alæ antice fulvæ apice fusco vittatæ.*

Body ferruginous, partly green or tawny : head hardly half the breadth of the chest ; crown much longer than broad, with three ridges, the middle one very indistinct, the side pair somewhat rounded in front ; protuberance very slightly inclined upward, nearly prismatic, black with a yellow stripe on each side, very slightly taper-

ing till near the tip, where it is linear, near thrice the length of the crown with which it forms a very obtuse angle, about one-third of the length of the body; tip obtuse: front and epistoma dart-shaped, with a longitudinal ridge, bright green on each side: mouth tawny, reaching beyond the hind-hips: fore-chest conical in front, deeply angular on the hind border, with three slight ridges, one in the middle, and a very oblique one on each side: a green stripe along the middle of the scutcheon, which has a slightly curved indistinct ridge on each side of the disk: abdomen obconical, longer than the chest, pitchy above, with a bright pale yellowish-green stripe on each side; underside tawny: legs greenish-tawny, slender; thighs towards the tips and shanks at the base red; hind-shanks armed with five spines: fore-wings tawny, yellowish-brown along the hind border from two-thirds of the length to the tip; brand bright red, occupying four areolets; hind-wings colourless, very slightly tinged with brown along the hind border and at the tip, near which there is a more distinct brown spot; veins brown, tawny or red towards the base. Length of the body  $5\frac{1}{2}$  lines; of the wings 12 lines.

a. ———? From Mr. Shuckard's collection.

## 26. DICTYOPHORA DESPECTA, M&S.

*Fulva, viridi vittata; caput prothorace quadruplò longius; abdomen obconicum, thorace paullo longius; pedes fulvi; tibiæ posticæ spinis quatuor armatæ; alæ limpidae.*

Body tawny: head full four times the length of the fore-chest; protuberance forming an uninterrupted line with the fore-chest, almost prismatic, slightly tapering from the base to the tip, which is rather obtuse; angles green: fore-chest slightly conical in front, very concave on the hind border, adorned with five bright green stripes; a slight oblique ridge on each side: scutcheon of the middle-chest adorned with three bright green stripes, and on each side with a green spot: abdomen obconical, a little longer than the chest: legs pale tawny, slender, slightly grooved; hind-shanks armed with four black-tipped spines; wings colourless; a slight tawny tinge on the fore-wings; brand tawny, occupying parts of two or three areolets; veins brown, tawny towards the base. Length of the body 5 lines; of the wings 8 lines.

a. Malabar Coast. Presented by T. Ward, Esq.

27. *Dictyophora microrhina*, Fem.

*Viridis, fusiformis; caput subascendens, prothorace serè quadruplò longius; abdomen obconicum, thorace longius, segmentorum marginibus posticis luteis; pedes virides; tarsi fulvi; alæ limpidae.*

Body spindle-shaped, bright grass-green: head about half the breadth of the chest, near four times the length of the fore-chest: protuberance very slightly inclined upward, forming a hardly concave line with the crown, nearly prismatic, tapering from the base to the tip which is conical; on the upper side a ridge extends from the hind border along half the length of the head and is there obsolete; on the under side three ridges extend to the epistoma: mouth green with a black tip, reaching a little beyond the hind-hips: fore-chest conical in front, very deeply and acutely angular on the hind border, with three ridges; the side pair undulating: three ridges on the scutcheon of the middle-chest, the side pair united and forming an angle in front and behind, and enclosing a spindle-shaped compartment: abdomen obconical, longer than the chest; hind borders of the segments mostly luteous: legs green, slender, slightly grooved; feet tawny; hind-shanks armed with four black-tipped spines: wings colourless; a very indistinct greenish tinge on the fore-wings; brand pale green, occupying four areolets; veins green, darker towards the tips. Length of the body  $5\frac{1}{2}$  lines; of the wings 12 lines.

a. New Orleans. From M. Sallé's collection.

28. *Dictyophora fusiformis*.

*Fusiformis, viridis, fulco varia; caput et prothorax ferruginea viridi vittata; caput prothorace paullò plus duplò longius; cornu latum; abdomen thorace multò longius; pedes virides; tarsi fulvi; alæ limpidae.*

Body spindle-shaped, grass-green, tawny here and there: head and fore-chest nearly ferruginous, slightly mottled with paler colour: head rather more than twice the length of the fore-chest; protuberance broad, hardly tapering from the base to the tip, which is obtuse, having four flat sides, adorned with three emerald-green stripes, one above and one on each side; under side slightly concave, with three ridges, the side pair obsolete on the epistoma: mouth tawny with a black tip, extending beyond the hind-hips: fore-chest slightly conical in front, deeply angular behind, adorned with five emerald-green ridges; the inner pair slightly oblique; the outer pair

very oblique, parallel to each side: three emerald-green ridges on the scutcheon; the side pair converge, unite and form an angle at each end, and thus enclose a spindle-shaped compartment: abdomen tapering from the base to the tip, very much longer than the thorax: legs slender, green, slightly grooved; feet tawny; hind-shanks armed with four black-tipped spines: wings colourless: brand green, occupying two areolets in one wing, three in the other; veins black, tawny towards the base. Length of the body 5 lines; of the wings 13 lines.

a. Para. From Mr. Stevens' collection.

### 29. DICTYOPHORA TRUNCATA, Mas.

*Flavo-viridis, fusiformis, viridi vittata; caput fulvum, prothorace duplò longius; abdomen thorace paulò longius; pedes virides; alæ limpide.*

Body yellowish-green, spindle-shaped: head conical, horizontal, tawny, twice the length of the fore-chest, its length much less than twice its breadth; upper surface much broader than the sides, green along the edges and the middle-ridge; a pale green stripe on the disk of each side; under side with three ridges, the side pair converging from the tip to the epistoma, along which the middle one is continued; mouth green with a black tip, extending a little beyond the hind-hips: fore-chest obtusely-conical in front, with a deep angular notch on the hind border, adorned with five green ridges, the inner pair oblique, and extending from the fore border to the disk: the three usual green ridges on the middle-chest: abdomen obconical, a little longer than the chest: legs green, slender, slightly grooved; hind-shanks armed with four black-tipped spines: hind-feet hardly widened: wings colourless; brand pale green, occupying four or five areolets; veins green, with some pale yellow bands towards the base, blackish towards the tips: cross-veins widened and slightly tinged with brown in the middle. Length of the body 6 lines; of the wings 14 lines.

a. Para. Presented by J. P. G. Smith, Esq.

### 30. DICTYOPHORA LONGIPENNIS, Mas.

*Fulvo-viridis, fusiformis: caput prothorace triplò longius; abdomen thorace multò longius; pedes virides; tibie posticæ spinis octo armatæ; alæ limpide, longæ, angustæ.*

Body spindle-shaped, pale green with a slight tawny tinge: head pointed, forming above a long acute triangle, its length in

front of the eyes about twice of that between them; some red dots on each of its four sides, those on the under side accompany the ridge which runs along the whole length and along the epistoma; on each side beneath there is also a more slight ridge, which extends along half the length from the tip of the head: fore-chest and middle-chest formed as in many other species, their state not allowing a more minute description: abdomen tapering towards the tip, very much longer than the chest: legs green, slender, slightly grooved; knees darker; hind-shanks armed with eight black-tipped spines: wings colourless, long and narrow; brand green, occupying three areolets; a very indistinct and pale buff tinge on the forewings; tawny towards the tips. Length of the body 5 lines; of the wings 13 lines.

a. Philippine Islands. From Mr. Cuming's collection.

### 31. *Dictyophora brachyrhina*.

*Fulva, gracilis; caput viride, thorace triplo longius, rufo-marginatum; thorax viridi vittatus; pedes virides: tibiæ posticæ spinis sex armatæ, alæ limpide.*

Body slender: head tapering to the tip which is obtuse, about half the breadth of the chest; its length above about thrice that of the fore-chest; its compartments above and on each side bright green with reddish borders which are ridged; front paler green, widened towards the epistoma, with three ridges, the middle one continued along the epistoma, the side pair disappearing a little beyond half the length: mouth yellowish-green with a black tip, extending beyond the hind-hips: fore-chest surrounded with a bright green border, slightly conical in front, with an angular notch on the hind border; three bright green ridges on the disk, the side pair slightly curved and oblique, united in front: three pale green ridges on the scutcheon of the middle-chest, the side pair very slightly curved, and including a spindle-shaped disk: abdomen wanting: legs green, slender, slightly grooved; hind-shanks armed with five black-tipped spines; hind-feet slightly widened: wings colourless; brand green, occupying three areolets; veins green, black at the tips of the wings. Length of the body 5? lines; of the wings 12 lines.

a. Columbia. From Mr. Turner's collection.



32. *DICTYOPHORA OBTUSIFRONS*, Fem.

*Fulva, fusiformis*; caput prothorace non duplò longius; thorax rufo vittatus; abdomen thoracè longius, apice viridi varium; pedes fulvi; tibiæ posticæ spinis quinque armatis; alæ limpide.

Body tawny, spindle-shaped: head conical, obtuse at the tip, much more than half the breadth of the head, its length above much less than twice that of the fore-chest; two indistinct ridges crossing each other at right angles on the upper side; front slightly contracted in its middle part and again widened towards the epistoma, it has three ridges, the side pair continue and slightly converge along the whole length, the middle one also accompanies the epistoma: mouth tawny, with a black tip, reaching the middle-hips: fore-chest convex, but not conical in front, having an angular notch on its hind border, surrounded by a green rim; a short luteous stripe on the hind part of the border on each side; three green ridges on the disk, the side pair oblique and very indistinct: on the scutcheon of the middle-chest are the three usual ridges which are not green, the side pair are slightly curved and include a spindle-shaped compartment: abdomen tapering from the base, longer than the chest, tinged with green towards the tip: legs pale tawny, slender, slightly grooved; hind-shanks armed with five black-tipped spines; hind-feet not much widened: wings colourless; brand bright green, occupying three areolets; veins green. Length of the body five lines; of the wings 12 lines.

33. *DICTYOPHORA NIGRIMACULA*, Mas.

*Fulva, nigro varia, viridi vittata*; caput thoracis longitudine; abdomen nigrum, maculis fulvis quinque vittatum, thorace paullo longius; pedes fulvi, nigro vittati; alæ limpide; alæ antice apice fuscæ.

Body spindle-shaped: head as long as the chest, tapering slightly to the tip which is obtuse, slightly elevated; protuberance transversely striated above and on each side; upper side ferruginous; crown with a yellow middle stripe, and on each side a green stripe, which is continued along near half the length to the tip; a black middle-stripe extends from the crown to the tip, towards which it occupies the whole disk; sides black with tawny borders; under side bright orange-red, having on each side a tawny brown-spotted stripe which in its course becomes bright green, and is continued along the epistoma; the bright green middle-ridge also extends along the

whole length, and is pale yellow at each end; the under side slightly widens along the whole length from the tip to the epistoma, with the exception of a slight contraction between the eyes; epistoma reddish at its base, brown with yellow stripes towards its tip; mouth tawny with a black tip, reaching the hind-hips: fore-chest ferruginous, slightly widened and almost angular in front, slightly concave along the hind border, adorned with five bright green ridges; the inner pair a little oblique, the outer pair more oblique, and parallel to the sides, which like the hind border are also green; the compartment beneath on each side of the eyes is pear-shaped, red, with a green border and a bright green middle-stripe: scutcheon of the middle-chest black along the fore border, adorned with three bright green stripes which are slightly interrupted, on each side near the base of the wing there is a bright green spot; under side black with a few yellow stripes and a ferruginous border: abdomen black, obconical, a little longer than the chest, adorned with five rows of greenish-tawny spots, those of the middle row are slender, and form a slightly interrupted stripe, the others are irregular and much excavated; legs tawny, slightly grooved, striped with black; feet black towards the tips; hind-shanks armed with five black-tipped spines; hind-feet much widened: wings colourless; tips of the fore-wings brown: brand very dark, occupying three or four areolets according to the variation of the veins; veins black, greenish-tawny at the base. Length of the body 5 lines; of the wings 10 lines.

a. North India. From Mr. Warwick's collection.

### 34. DICTYOPHORA ALBIVITTA, Mas.

*Fulva, viridi vittata; caput thorace paullo longius; abdomen viride, flavo varium, albido vittatum, apice fulvum; pedes fulvo-virides; tibiae posticae spinis quinque armatae; alae limpidae; alae anticae apice subfulvae.*

Body tawny, spindle-shaped: head a little longer than the chest and about half its breadth, slightly ascending, almost imperceptibly tapering from the crown to the tip which is blunt; upper side adorned with three green stripes, the middle one more distinct than the side pair; under side adorned with a bright green ridge, and on each side with a pale green stripe, the three are continued along the whole length and along part of the epistoma: mouth tawny, with a black tip, extending a little beyond the middle-hips: fore-chest convex but not conical in front, slightly concave along the hind border, which like the sides is green; disk adorned with five bright green stripes; the inner pair curved, slightly oblique; the outer pair

more oblique, parallel to the sides; plates beneath pear-shaped, bordered with green, and adorned with a green stripe: disk of the scutcheon of the middle-chest adorned with the three usual bright green stripes, and having a green spot on each side: abdomen grass-green, obconical, mottled with yellow, tawny at the tip, adorned with three parallel indistinct whitish stripes: legs pale tawny, partly green, slightly grooved; thighs and anterior shanks striped with brown; hind-shanks armed with five black-tipped spines; hind-feet much widened: wings colourless; a slight tawny tinge on the tip of the fore-wings; brand tawny, occupying two areolets and part of a third; veins pale greenish-tawny, darker towards the tips. Length of the body 5 lines; of the wings 10 lines.

a. North Bengal. From Miss Campbell's collection.

### 35. DICTYOPHORA PALLIDA, Mas.

*Lutea, fusiformis, viridi vittata; caput thoracis longitudine; abdomen flavum, albido vittatum, basi luteum, apice fulrum, thorace paullo longius; segmentorum margines postici virides; pedes flavo-virides; tibiae posticae spinis quatuor armatae; alae limpidae; alae anticae apice subfulvae.*

Body spindle-shaped, pale luteous: head full as long as the chest, and full half its breadth, ascending, prismatic and linear from the front of the crown to the tip which is black and convex; upper side with a bright green stripe along each edge, and with a short green middle stripe, which does not extend beyond the eyes; sides green: under side bright luteous with three bright green ridges which are continued along part of the epistoma: mouth tawny with a black tip, reaching nearly to the hind-hips: fore-chest hardly conical in front, slightly concave behind, bordered with green, adorned as usual with five bright green stripes; side plates pear-shaped with green borders, a bright green middle stripe: scutcheon of the middle-chest with the three green stripes, and the two green side stripes: abdomen obconical, a little longer than the chest, yellow with whitish stripes, luteous towards the base, tawny at the tip; hind borders of the segments grass-green: legs slender, slightly grooved, dull pale yellow, tinged with green; tips of the feet and of the fore-shanks brown; hind-shanks armed with four black-tipped spines; hind-feet moderately broad: wings colourless; a slight tawny tinge on the tips of the fore-wings; brand pale brown, occupying two areolets and part of a third; veins green, brown towards the tips. Length of the body  $3\frac{1}{2}$  lines; of the wings 7 lines.

a. North India. From Mr. Warwick's collection.

## 36. DICTYOPHORA SINICA.

*Lutea, ferè fusiformis, viridi vittata; caput thoracis longitudine; abdomen viride, supra fusco vittatum; pedes fulvi, fusco vittati; alæ limpidae, anticæ apice fulvo-fuscae.*

Body pale luteous, almost spindle-shaped: head as long as the chest and about half its breadth, ascending, tapering very slightly from the crown to the tip which is convex; upper side with a short green stripe which does not extend beyond the crown, on whose sides the edges are also green; under side bright luteous with a pale green border; middle ridge bright green, extending to the epistoma; the latter tawny, striped with brown towards the tip: mouth pale tawny: fore-chest convex in front and equally concave behind, adorned with the usual green stripes: three indistinct green stripes on the middle-chest: abdomen green, slightly obconical, broader but not longer than the chest, pale tawny at the tip, adorned with a brown stripe on the disk: legs pale tawny, slender, slightly grooved, partly striped with brown; hind-shanks armed with four black-tipped spines: wings colourless; tips of the fore-wings pale yellowish-brown; brands brown, occupying three areolets; veins green, brown towards the tips. Length of the body  $4\frac{1}{2}$  lines; of the wings 8 lines.

a. China. Presented by G. T. Lay, Esq.

## 37. DICTYOPHORA LEPTORHINA, MAS.

*Fulva aut lutea, fusiformis, viridi vittata; caput thorace longius; abdomen viride, basi subluteum, thorace longius; pedes fulvi; femora nigro vittata; alæ limpidae.*

Body tawny, spindle-shaped: head longer than the chest and full half its breadth, ascending, tapering slightly from the crown to the tip which is convex; the four sides of equal breadth, with green edges; the green stripe above is only distinct on the crown, that beneath appears along its whole length to the epistoma which is brown: mouth tawny with a black tip, reaching the hind-hips: fore-chest convex in front, more slightly concave behind, adorned as usual with the green ridges which also appear on the middle-chest: abdomen green, obconical, slightly luteous towards the base, longer than the chest: legs pale tawny, slightly grooved; thighs striped with black; hind-shanks armed with five black-tipped spines; hind-feet much widened: wings colourless; brand brown, colouring the borders but not the disks of three areolets; veins of the fore-wings

brown, green towards the base; veins of the hind-wings black. Length of the body  $4\frac{1}{2}$  lines; of the wings 9 lines.

a. Java. From Mr. Argent's collection.

Var. Chest luteous.

b. East India. From Archdeacon Clerk's collection.

### 38. DICTYOPHORA INSCRIPTA, Mas.

*Ferrugineo-fulva, fusiformis, viridi vittata; caput thoracis longitudinaline; abdomen thorace longius et paullo latius, maculis fuscis et albidis vittatum; pedes fulvi, fusco vittati; tibiæ posticæ virides; alæ limpidae.*

Body ferruginous-tawny, spindle-shaped: head ascending, as long as the chest and much more than half its breadth, tapering slightly from the crown to the tip which is truncated, indistinctly striated across; sides rather narrower than the upper surface which has two luteous spots on the crown; under side with two luteous stripes and with three dull pale green ridges, the side pair shorter than the middle one, which is continued along the epistoma; epistoma and mouth striped with black, the latter reaching the hind-hips: fore-chest luteous, convex in front, more slightly concave behind, adorned with three bright green stripes, the side pair oblique, widening to the hind border; a pale green spot at the base of each fore-wing; side plates with the usual green stripes, three of which adorn the middle-chest: abdomen nearly elliptical, longer and a little broader than the chest, adorned with six rows of brown dots, and with five rows of whitish spots, the middle row forming a slender interrupted stripe; legs tawny, striped with brown; hind-shanks pale green, armed with five black-tipped spines; hind-feet broad: wings colourless; brand brown, occupying from two to four areolets, according to the variation of the veins, which are green with brown tips in the fore-wings, and with black tips in the hind-wings; cross-veins of the fore-wings very slightly clouded with brown. Length of the body 5 lines; of the wings 10 lines.

a, b. Hong-Kong. Presented by J. C. Bowring, Esq.

### 39. DICTYOPHORA CONCOLOR, Mas.

*Fulva, fusiformis; caput ferrugineum, thorace longius; abdomen lineare, thorace longius; pedes fulvi: alæ anticæ subfulvæ.*

Body tawny, spindle-shaped: head ferruginous, ascending, indistinctly striated across, longer than the chest and full half its breadth, slightly tapering from the crown to the tip which is rounded,

a little broader than deep, slightly mottled at the base beneath, without green stripes: chest with the usual ridges, but not striped with green: fore-chest almost conical in front, with a deep angular notch on the hind border: abdomen linear, conical towards the tip, longer than the chest: legs tawny, slightly grooved; hind-shanks armed with four black-tipped spines; hind-feet broad: fore-wings slightly tinged with tawny; brand not much darker than the fore-wings, occupying one areolet which is very long; veins of the fore-wings tawny, of the hind-wings brown. Length of the body 5 lines; of the wings 9 lines.

#### 40. *DYCTIOPHORA LONGIROSTRIS*, Latr. MSS.

Mas. *Flavo-viridis, fusiformis, viridi vittata; caput thorace multò longius, apice fuscum; abdomen thorace paulò longius; pedes fulvo-virides; alæ limpidae, antice apice subfulvæ.*

Body grass-green, spindle-shaped: head horizontal, transversely striated, much longer than the chest and more than half its breadth, slightly tapering from the crown to the tip which is brown and almost obtuse; the sides are broader than the upper surface, and the under side is pale luteous with three green ridges: mouth pale tawny with a black tip, extending a little beyond the hind-hips: disk of the chest yellowish adorned with three bright green parallel ridges which are continued from the head: fore-chest convex in front and more slightly concave along the hind border: abdomen obconical, a little longer than the chest: legs green, tinged with pale tawny; hind-shanks armed with five black-tipped teeth; hind-feet broad: wings colourless; a pale tawny tinge towards the tips of the fore-wings; brand obsolete; veins green. Length of the body 4 lines; of the wings 7 lines.

a. Spain.

#### 41. *DICTYOPHORA LONGIPES*.

*Dictyophora longipes*, Léon-Duf. *Ann. Sci. Nat. 3me Série*, xi. 98, pl. 5, f. 27—36.

Spain.

#### 42. *DICTYOPHORA GENEI*.

*Dictyophora Genei*, Léon-Duf. *Ann. Sci. Nat. 3me Série*, xi. 101. South Europe.

## 43. DICTYOPHORA ———? Pupa.

*a—d.* Cape. From M. Dregé's collection.

## 44. DICTYOPHORA ———? Pupa.

*a.* Sicily. From Mr. Melly's collection.

## Genus 5. ASELGIEA.

*Dictyophoræ* affinis: *alæ anticæ confertim reticulatæ*; *areola quæque dimidio intersecta*.

Distinguished from *Dictyophora* by the structure of the body, and more especially by that of the fore-wings, which are noticed in the following description.

## 1. ASELGIEA RAMULIFERA, Mas.

*Flavo-viridis, subtuberculata; caput prothorace duplò longius; abdomen thorace non longius; pedes fulvo-virides; alæ limpidæ.*

Body elliptical, grass-green, dull, slightly tuberculate, here and there yellowish: head twice the length of the fore-chest, triangular, its length equalling its breadth; its tip pointed: a ridge on each side above; three ridges on the under side, the side pair slightly converging till very near the epistoma where they diverge; epistoma large, with a slight middle-ridge, rounded and having a rim on each side for half the length, lanceolate from thence to the tip: mouth green with a black tip, reaching the hind-hips: chest not ridged: fore-chest slightly convex in front and equally concave on the hind border, a little widened on each side: abdomen obconical, not longer than the chest: legs green, grooved, tinged with tawny; hind-shanks armed with seven black-tipped spines; hind-feet somewhat widened: wings colourless; the whole surface of the fore-wings thickly intersected with minute areolets; from the vein on one side of each a branch proceeds into the disk and is there furcate; veins green, those of the hind-wings comparatively few. Length of the body 4 lines; of the wings 10 lines.

*a.* Port Natal. From M. Gueinzus' collection.

## Genus 6. MONOPSIS.

Monopsis, *Spinola, Ann. Soc. Ent. Fr.* viii. 302.

## 1. MONOPSIS TABIDA.

Monopsis tabida, *Spin. Ann. Soc. Ent. Fr.* viii. 304, pl. 10, f. 4.  
*Amyot et Serv. Hist. Nat. Hém.* 507, 1.

United States.

## 2. MONOPSIS PALLIDA, Mas.

*Lutea; caput prothorace duplò longius; abdomen thoracis longitudine, viridi fasciatum, subtus albidum; pedes virides; femora basi lutea; alæ limpide.*

In this species the net-work of the wing occupies a much larger part than it does in *M. tabida*, the first longitudinal areolet is more remote from the fore border of the wing, and the intermediate cross-veins are much longer, more numerous and more oblique: body pale luteous: head flattened, conical, about twice the length of the fore-chest, upper side surrounded with a rim, deeply notched on the hind border, divided by a middle-ridge into two compartments; front contracted in the middle, more widened towards the epistoma, surrounded by a rim, and divided by a longitudinal ridge; sides of the head about half its breadth above: mouth pale luteous: fore-chest short, convex in front, with a deep angular notch on its hind border corresponding to that on the head, surrounded by a rim, having three ridges, the side pair very oblique: three ridges on the middle-chest, the side pair very slightly waved: abdomen obconical, as long as the chest, whitish beneath; sides and hind borders of the segments green: legs pale green; thighs pale luteous towards the base: hind-shanks armed with four black-tipped spines: wings colourless; veins green, pale luteous at the base. Length of the body 3 lines; of the wings 7 lines.

a. Jamaica. From Mr. Gosse's collection.

## 3. MONOPSIS VIRIDIS, Fem.

*Viridis; caput prothorace vix duplò longius; abdomen thorace non longius; pedes virides; alæ limpide.*

Structure of the wing-veins like that of *M. tabida*: body pale green: head conical, flattened, rather less than twice the length of



the fore-chest; upper side surrounded by a rim, deeply notched on the hind border, divided by a middle ridge into two compartments; it also resembles *M. pallida* in the structure of the front, and of the chest: abdomen obconical, not longer than the chest: legs pale green; hind-shanks armed with four black-tipped spines: wings colourless; veins green. Length of the body  $2\frac{1}{2}$  lines; of the wings 6 lines.

a. Isle St. Thomas. From Mr. Gosse's collection.

#### 4. MONOPSIS FUSCA.

*Fusca, fusiformis, fulvo guttata; caput prothorace longius; abdomen thorace paullo longius; pedes fulvi; alæ fuscæ nigro guttatae.*

Structure of the wing-veins very different from that of all the preceding species, the first longitudinal vein being at a considerable distance from the fore border, with no intermediate cross-veins: body brown, spindle-shaped: head flattened, conical, much less than twice the length of the fore-chest; upper side with a longitudinal ridge, surrounded with a rim, concave on the hind border; sides about half the breadth of the upper or under surface, the latter is very slightly contracted in the middle, and its ridge does not extend beyond the eyes from the tip: mouth ferruginous, extending much beyond the hind-hips: fore-chest convex in front, concave behind, with a ridge on each side; middle-chest not ridged: abdomen obconical, a little longer than the chest: legs tawny; hind-shanks armed with spines: wings pale brown, minutely mottled, with a few black dots along the fore border and near the tips; veins pale brown. Length of the body  $2\frac{1}{2}$  lines; of the wings 6 lines.

a. ——— ?

#### 5. MONOPSIS FLORIDÆ, MAS.

*Fusca, fusiformis, fulvo guttata; caput prothorace multo longius; pectus flavum; abdomen apice fulvum, basi rufo bimaculatum; pedes fuscæ; alæ subfusca, subnebulosa, ad costam fusca guttatae.*

Structure of the wing-veins like that of *M. fusca*, but there is an indistinct cross-vein between the fore border and the first longitudinal vein: body brown, speckled with tawny, spindle-shaped: head flattened, conical, much longer than the fore-chest, surrounded by a rim, not ridged, concave on the hind border; sides about half the breadth of the upper or the under surface, the latter is very

slightly contracted between the eyes, and its slight ridge extends to the epistoma which is nearly black and has a few large shallow punctures: mouth brown, extending a little beyond the hind-hips: fore-chest almost truncate in front, concave behind, with a ridge on each side and a more slight ridge along the middle: two ridges on the middle-chest: breast yellow: abdomen brown, tawny at the tip, with a red spot on each side at the base: legs pale brown, slightly grooved; each hind-shank armed with one tooth: fore-wings pale brown, over-spread with very numerous almost colourless dots, and having a few brown spots along the fore borders; hind-wings pale gray; veins pale brown. Length of the body 2 lines; of the wings  $5\frac{1}{2}$  lines.

a—c. St. John's Bluff, Florida. Presented by E. Doubleday, Esq.

#### 6. MONOPSIS SINICA, Fem.

*Flavo-viridis, fusiformis, viridi vittata; caput prothorace paullo longius; abdomen thorace non longius; pedes flavo-virides, tarsi fulvi; alae anticae virides fulvo subtuberculatae, apice limpidae.*

Head much shorter than in all the preceding species: no cross-vein along the fore border before the reticulated part of the wing: body yellowish-green, spindle-shaped: head and chest tawny above: head slightly conical, not much longer than the fore-chest, rounded and surrounded by a bright green ridge on each side and in front, slightly concave on the hind border, adorned with three bright green ridges, the side pair not extending beyond the disk from the hind border: fore-chest almost truncate in front, with a deep obtusely angular excavation on the hind border, adorned with three bright green ridges, the side pair oblique, longer than the middle one: front smooth, flat, scutcheon-shaped, not contracted in the middle, with a slight ridge on the border and a slight ridge in the middle, divided by a deep suture from the epistoma: mouth pale yellowish-green: abdomen obconical, not longer than the chest: legs pale yellowish-green; very slightly grooved; feet tawny; hind-shanks armed with three black-tipped spines which are between the middle and the tips: wings colourless; basal part of fore-wings pale green, occupying two-thirds of the surface, covered with little tawny tubercles, very distinct from the reticulated part, which however has unusually few cross-veins; veins green. Length of the body  $1\frac{3}{4}$  line; of the wings 5 lines.

a. Hong Kong. Presented by J. C. Bowring, Esq.

## Genus 7. PHALÆNOMORPHA.

Phalænomorpha, *Amyot et Serv. Hist. Nat. Hém.* 525, 415.

## 1. PHALÆNOMORPHA INCUBANS.

Phalænomorpha incubans, *Amyot et Serv. Hist. Nat. Hém.* 525, 1.  
pl. 12, f. 8.

St. Domingo?

## Genus 8. ELIDIPTERA.

Elidiptera, *Spinola, Ann. Soc. Ent. Fr.* viii. 304.

Helicoptera, *Amyot et Serv.*

## 1. ELIDIPTERA CALLOSA.

Elidiptera callosa, *Spin. Ann. Soc. Ent. Fr.* viii. 305, 1, pl. 15, f. 2.  
Brazil.

## 2. ELIDIPTERA ADVENA.

Elidiptera advena, *Géné MSS. Spin. Ann. Soc. Ent. Fr.* viii. 307,  
2, pl. 15, f. 3.

Sardinia.

## 3. ELIDIPTERA GENCI.

Elidiptera Genci, *Spin. Ann. Soc. Ent. Fr.* viii. 308, 3.  
Italy.

## 4. ELIDIPTERA MARGINICOLLIS.

Elidiptera marginicollis, *Spin. Ann. Soc. Ent. Fr.* viii. 309, 4, pl.  
15, f. 4.

Menocria, *Amyot, Ann. Soc. Ent. Fr. 2me Série*, v. 160, 382.  
Sicily.

## 5. ELIDIPTERA CINCTICEPS.

Elidiptera cincticeps, *Spin. Ann. Soc. Ent. Fr.* viii. 310, 5.  
Helicoptera cincticeps, *Amyot et Serv. Hist. Nat. Hém.* 526, 1.  
Senegal.

## 6. ELIDIPTERA FIMLIVATA, MRS.

*Fulva, lata, nigro varia; caput prothorace multò brevius; pectus flavum; abdomen luteum, subtus nigrum fulvo maculatum flavoque fasciatum; pedes fulvi fusco maculati; alæ antice subrufæ, flavo varicæ nigro maculatæ, ad costam dilatatæ sublimpidæ; alæ posticæ fulvo univittatæ, apice limpidæ.*

Body tawny, broad: head much shorter than the fore-chest, conical in front, with an angular protuberance on each side by the eye, irregularly marked with brown dots, some of which are confluent; front smooth, shining, with a black spot on each side of its fore border adjoining the epistoma, with three ridges, the middle one short, the side pair converging to the fore border: epistoma adorned with two ferruginous stripes, on each side of which are two black spots: mouth mostly black, reaching the hind-hips: eyes large: fore-chest short behind, notched on each side, which is concave according to the eye, much widened in front and occupying some space between the eyes: scutcheon of the middle-chest triangular, with its broadest side in front, adorned with some black marks, which mostly consist of a U-shaped spot on each side: hind-chest pitchy, ridged across, pale green towards the base of the wing, black along the fore border: breast pale yellow: abdomen nearly elliptical, a little longer and broader than the chest, dark luteous above; under side black with tawny spots, adorned with yellow bands along the hind borders of the segments: legs tawny, grooved, variously marked with brown; feet brown, with a tawny band on each: hind-shanks armed with two black-tipped spines besides those on the tips: fore-wings rusty red, mingled with pale yellow, with black marks interspersed; a very broad nearly colourless margin extending along the fore border beyond the tip, furnished with very numerous cross-veins which are coloured like the disk, and are mostly forked at one-fourth of their length, some of the forks are again divided; veins of the disk mostly green, spotted here and there with brown: hind-wings brown, with a pale tawny stripe extending along the disk of each to the tip which is colourless; veins brown, red at the tips. Length of the body 6 lines; of the wings 14 lines.

a. ———? Presented by the Entomological Club.

## 7. ELIDIPTERA TUBERCULOSA, Fem.

*Lutea, nigro varia; abdomen thorace paullo longius; pedes fulvi; alæ anticæ sublimpidæ, subtuberculatæ, nigro variæ, ad venas fulvæ, subtus albo farinosæ, anticæ dilatatæ; alæ posticæ albæ.*

Body luteous: head conical above, having on each side a ridge, which is most elevated and partly black between the eyes; a black spot at the tip on the under side, whose side borders are slightly contracted in the fore part, but much widened towards the epistoma, the latter is very slightly keeled, and has a row of oblique furrows on each side: mouth tawny, extending far beyond the hind-hips; feelers luteous, rather long; second joint much longer than the first: fore-chest almost quadrate, hardly convex in front nor concave behind, with a small triangular black spot on the fore border, and a black spot on each side: middle-chest adorned in front with black marks, some of which form two oblique black stripes united in front: abdomen nearly elliptical, a little longer and broader than the chest: legs tawny, rather broad, slightly grooved; hind-shanks armed with one black-tipped spine besides those at the tip: wings broad; fore-wings colourless, powdered with white beneath, marked with black and slightly tuberculate here and there above; disks of the areolet so covered with luteous dots as to give the whole wing that colour; veins luteous; cross-veins very numerous towards the tip and along the fore border, where the wing is convex and much widened, and slightly waved: hind-wings white; veins dull tawny. Length of of the body 6 lines; of the wings 16 lines.

## 8. ELIDIPTERA INDICA, Mas.

*Fulva, depressa; caput prothoracis longitudine; abdomen thorace paullo longius et latius; pedes fulvi; alæ anticæ latæ, subfulvæ, fusco guttatæ et unifasciatæ; alæ posticæ albide.*

Body pale tawny, mottled with darker colour: head conical, not longer than the fore-chest, somewhat concave and with a brown stripe above, yellow and marked with darker colour beneath, where it widens to the epistoma: mouth luteous, reaching to the hind-hips: eyes very prominent: feelers luteous, rather long; second joint longer than the first: fore-chest conical, slightly excavated and indistinctly angular on the hind border: disk of the middle-chest very concave; a ridge on each side towards the tip which forms an acute angle:

abdomen slightly obconical, a little longer and broader than the chest: legs pale tawny, slightly grooved; a single black-tipped spine on each hind-shank: wings broad; fore-wings very pale tawny, almost colourless towards the tips, adorned on the veins with numerous brown dots, some of which are confluent; a brown band across each at one-third from the base; veins pale tawny; a broad convex membrane along the fore border and at the tip, slightly waved, furnished with numerous veins, most of which are connected by a band of cross-veins; hind-wings whitish; veins pale straw-colour. Length of the body 5 lines; of the wings 12 lines.

a. French rocks, near Madras.\* Presented by Mrs. Capt. Hamilton.

#### 9. ELIDIPTERA FIMBRIA, Fem.

*Lutea; mesothorax fuscus; abdomen basi nigrum; pedes fulvi; alæ anticae flavo-fuscae, maculis nigro-fuscis ornatae, ad costam dilatatae; alæ posticae subcinereae.*

Body pale dull luteous: head conical, a little longer than the fore-chest, having a slight ridge on each side border; front widest between the eyes: mouth tawny, nearly reaching the hind-hips: eyes not prominent: fore-chest truncate in front, slightly ridged along the middle, hardly excavated on the hind border, paler than the head: middle-chest pale brown, with two ridges which are oblique in front: abdomen elliptical, longer than the chest, marked with black at the base: legs tawny, slightly grooved; a single black-tipped spine near the tip of each hind-shank: wings broad; fore-wings pale yellowish-brown, with small irregular dark brown marks, which are chiefly on the veins, convex, much widened and furnished with numerous veins along the fore border; veins pale tawny: hind-wings pale gray; veins tawny. Length of the body 5 lines; of the wings 13 lines.

a. Silhet. From the Rev. J. Stainforth's collection

#### 10. ELIDIPTERA OCCIDENTIS, Mas.

*Fulva, fusiformis, nigro maculata; prothorax viridis; abdomen flavo fuscium; pedes fulvi; alæ anticae fulvae, fusco maculate, basi subtuberculatae, apice sublimpidæ, ad costam dilatatae; alæ posticae albidæ, apice subcinereae.*

Body tawny, spindle-shaped: head convex in front, concave on the hind border, slightly marked with black, very little longer than the fore-chest; front luteous, flat, broadest in the middle: mouth luteous, reaching near to the hind-hips: antennæ pale luteous, long, cylindrical; second joint nearly twice the length of the first: eyes

not prominent: fore-chest pale green, convex in front, slightly concave behind, with a brown spot on each side of the disk: a greenish tinge in the disk of the middle-chest, on each side of which are three black spots in the form of a triangle: hind-chest yellow: abdomen obconical, longer than the chest; hind borders of the segments yellow: legs tawny, slightly grooved, rather broad; hind-shanks armed with two black-tipped spines: wings broad; fore-wings dull tawny, nearly colourless towards the tips, slightly tuberculate at the base, fore-membrane very broad and convex towards the base, furnished with very numerous nearly parallel branch veins; a pale brown triangular spot pointing inward on each areolet at the tip; a few brown spots scattered on the disk; under side tinged with white; veins pale green: hind-wings whitish, tinged with pale purplish brown towards the tips and along the hind border; veins tawny, pale green towards the base. Length of the body  $4\frac{1}{2}$  lines; of the wings 12 lines.

a. West Coast of North America. Presented by Capt. Kellet and Lieut. Wood.

# 11. ELIDIPTERA PUNCTATA, Mas.

*Viridi-fulva, sat lata, fusco maculata; pedes viridi-fulvi; alæ antice virides, albo farinosæ, basi subtuberculata, fusco maculata, ad costam dilatata; alæ posticæ albide, apice subfusca.*

Body tawny, tinged with pale green, rather broad: head a little longer than the fore-chest, slightly marked with brown, forming an obtuse angle on each side in front of the eyes; a brown spot on the tip; two brown spots on each side in the groove above the base of the antennæ; front quadrate, flat; epistoma forming an acute triangle: mouth pale tawny with a brown tip, reaching the middle-hips: eyes prominent: feelers rather long, yellow towards the base; second joint about twice the length of the first: fore-chest convex in front, equally concave behind, with a brown spot on each side of the disk near the fore border: two brown spots on each side of the middle-chest: abdomen obconical, longer than the chest; upper appendage of the sexual apparatus brown at the tip: legs pale greenish-tawny, slightly grooved, rather broad; hind-shanks armed with two black-tipped teeth: wings broad; fore-wings pale dull green, powdered with white, somewhat tuberculate at the base, adorned with dark brown dots which are mostly along the border; fore border much dilated and very convex near the base, furnished with very numerous branch veins, which are mostly parallel; a few of them are forked; veins pale green: hind-wings whitish, tinged with

pale brown towards the tips and along the hind border; veins pale straw-colour. Length of the body  $3\frac{1}{2}$  lines; of the wings 9 lines.

a. North America. Presented by the Entomological Club.

## 12. ELIDIPTERA GUIANÆ, Fem.

*Fulva, subtus albo farinosa; thoracis discus fuscus; abdomen luteum; pedes fulvi; alæ anticae subfulvæ, fusco guttatae, basi subtuberculatae, apice albidae, ad costam dilatatae; alæ posticae albidae, apice subfuscae.*

Body tawny, powdered with white beneath: head and fore-chest wanting: middle-chest marked with brown which occupies most of its disk: abdomen luteous, obconical, a little longer than the chest, partly brown at the tip: legs tawny, slightly grooved, rather broad; hind-shanks armed with two black-tipped spines: wings broad, powdered with white: fore-wings pale tawny, whitish towards the tips, slightly tuberculate near the base, adorned with some brown dots which are mostly near the fore border, this is much dilated and very convex near the base and is furnished with very numerous nearly parallel branch veins; veins tawny: hind-wings whitish, iridescent, tinged with very pale brown towards the tips and along the hind border; veins pale tawny. Length of the body  $3\frac{1}{2}$  lines; of the wings 10 lines.

a. British Guiana. Presented by Sir Robert Schomburgk.

## 13. ELIDIPTERA FERRUGINEA, Mas.

*Fulva; caput flavo maculatum; mesothoracis discus piceus; pedes fulvi; alæ basi subinflatae, ad costam subconvexæ non dilatatae; alæ posticae subcinerea.*

Body tawny: head much narrower than the chest; its two segments divided by a suture which forms an angle towards the hind border; hind segment yellow, pitchy on the disk, its back forming a right angle with each side on which the eye is seated; fore segment pitchy, rounded in front; front rather broad, rounded on each side, pitchy next the crown: mouth tawny, reaching the hind-hips: antennæ ferruginous, rather short; second joint near twice the length of the first: fore-chest as long as the head, very finely rugulose, somewhat truncated in front, slightly concave on the hind border: disk of the middle-chest pitchy: abdomen obconical, not longer than the chest: legs tawny, grooved, rather broad; a tooth on each hind-shank near the tip: fore-wings ferruginous, darker at the tips,



partly inflated at the base and along the hind border, near whose base there are a few rows of little tubercles; reticulated part occupying full one-third of the wing; fore border slightly convex, not dilated; a row of numerous short parallel branch-veins between it and the first longitudinal vein; veins ferruginous: hind-wings grayish. Length of the body 3 lines; of the wings 8 lines.

a. India. From Mr. Sowerby's collection.

#### 14. ELIDIPTERA RUFESCENS, Fem.

*Ferruginea, piceo varia; thoracis discus piceus, fulvo birittatus, abdomen subtus fulvum vel luteum; pedes fulvi, fusco vittata; alæ anticae fulvae, rufo venosae, nigro vittatae; alæ posticae sub-fuscae.*

Body short, broad, ferruginous, partly pitchy: head narrow, about one-fourth of the breadth of the fore-wing; crown very small, nearly square, rather broader towards the fore-chest, with a tawny ridge on each side and in front; front very long and narrow, with a tawny border and two slight longitudinal ridges, and having a black spot on each side by the crown, whence it very slightly widens to the epistoma; its length about six times its breadth, the fore part forming right angles with the sides which are tawny; epistoma lanceolate, tawny, black towards the tip, full half the length of the front: mouth tawny, reaching the hind-hips: eyes rather large and prominent: fore-chest longer than the crown, nearly conical in the middle, very concave on each side for the reception of the eyes, almost black, its border tawny and slightly ridged: middle-chest triangular, longer than the fore-chest, its disk pitchy with the exception of two tawny stripes: abdomen obconical, a little longer than the chest, more or less tawny or luteous beneath: legs tawny, striped with brown, grooved, rather broad; hind-shanks armed with two teeth towards the tips: fore-wings tawny, very broad, with a black stripe along the fore-membrane, which is brown convex and broad; veins red, brown along the fore border, where they are parallel as in other species; cross-veins numerous towards the tips: hind-wings pale brown. Length of the body  $1\frac{1}{2}$ —2 lines; of the wings 4—5 lines.

a, b. Sierra Leone. Presented by the Rev. D. F. Morgan.

#### 15. ELIDIPTERA? TRISTIOPS.

*Tristiops, Amyot, Ann. Soc. Ent. Fr. 2me Série, v. 161, 383.*  
South France. ?

## 16. ELIDIPTERA? OCHROPHARA.

Ochrophara, *Amyot, Ann. Soc. Ent. Fr. 2me Série* v. 162, 384.  
Sicily.

## 17. ELIDIPTERA? HYALESTHES.

Hyalesthes, *Amyot, Ann. Soc. Ent. Fr. 2me Série*, v. 163, 385.  
North Italy.

## 18. ELIDIPTERA? LEPTARCYA.

Leptarcya, *Amyot, Ann. Soc. Ent. Fr. 2me Série*, v. 163, 386.  
France.

## 19. ELIDIPTERA? MISBECA.

Misbeca, *Amyot, Ann. Soc. Ent. Fr. 2me Série*, v. 163, 387.  
Piedmont.

## 20. ELIDIPTERA? SABECUS.

Sabecus, *Amyot, Ann. Soc. Ent. Fr. 2me Série*, v. 164, 388.  
Paris.

## 21. ELIDIPTERA? CORTICINA.

Ricania corticina, *Burm. Handb. Ent.* ii. 1, 161, 3.

## Sub-Tribe 4. CIXIOIDES.

Cixioïdes, *Spinola, Ann. Soc. Ent.* viii. 202, 311.

Fulgorides, *Amyot et Serville* (ad partem).

Pseudophanides, *Amyot et Serville* (ad partem).

Delphacides, *Amyot et Serville* (ad partem).

Flatides, *Amyot et Serville* (ad partem).

## Genus 1. PHENAX.

Phenax, *Germ. Silb. Rev. Ent.* 1.

Fulgora, *Olivier, Germur.*

Eumallia, *Guérin.*

## 1. PHENAX VARIEGATA.

Phenax variegata, *Germ. Silb. Rev. Ent.* i. 175, 3. *Burm. Handb. Ent.* ii. 1, 167, 1. *Blanch. Hist. Nat. Ins.* iii. 170. *Hém.* pl. 12, f. 3. *Amyot et Serv. Hist. Nat. Hém.* 498, 1.

*Fulgora variegata*, *Oliv. Enc.* vi. 573, 30. *Stoll, Cic.* 43, pl. 9, f. 45. *Enc. Méth.* x. 573, 451. *Germ. Thon, Arch.* ii. 2, 46.

*Eumallia variegata*, *Guér. Voy. Belanger, Zool.* 451, 11.

*Phænax reticulata*, *Spin. Ann. Soc. Ent. Fr.* viii. 316.

*a.* S. America. Presented by Sir A. Calcott.

*b—d.* Rio Doce, Brazil. Presented by J. Bowring, Esq.

*e—g.* Brazil.

*h, i.* Brazil (Pupa). Presented by the Entomological Club.

## 2. PHENAX AURICOMA.

*Phenax auricoma*, *Klug, Burm. Handb. Ent.* ii. 1, 168, 2.

*Lystra auricoma*, *Burm. Gen. Ins.* 1. *Rhyn. Cic. Fulg. Lyst.* 7.

*a—e.* Mexico. Presented by — Bright, Esq.

## 3. PHENAX? MULTIGUTTATA.

*Lystra multiguttata*, *Burm. Gen. Ins.* 1. *Rhyn. Cic. Fulg. Lyst.* 2.

South America.

## Genus 2. PTERODICTYA.

*Pterodictya*, *Burm. Handb. Ent.* ii. 1.

*Tettigonia*, *Fabr.*

*Lystra*, *Germar.*

### 1. PTERODICTYA EPHEMERA.

*Pterodictya ephemera*, *Burm. Handb. Ent.* ii. 1, 155, 1. *Amoyot et Serr. Hist. Nat. Hém.* 503, 1.

*Tettigonia ephemera*, *Fabr. Ent. Syst.* iv. 25, 34. *Syst. Rhyn.* 43, 52. *Stoll, Cic.* 18, pl. 1, f. 4.

*Lystra reticularis*, *Germ. Thon, Arch.* ii. 2, 52, 3.

*a.* Para. From Mr. Bates's collection.

## Genus 3. COLPOPTERA.

*Colpoptera*, *Burm. Handb. Ent.* ii. 1.

### 1. COLPOPTERA SINUATA.

*Colpoptera sinuata*, *Burm. Handb. Ent.* ii. 1, 155, 1.

## 2. COLPOPTERA MARGINALIS.

*Coloptera marginalis*, *Burm. Handb. Ent.* ii. 1, 156, 2.

## Genus 4. BOTHRIOCERA.

*Bothriocera*, *Klug, Burm. Handb. Ent.* ii. 1.

## 1. BOTHRIOCERA TINEALIS.

*Bothriocera tinealis*, *Klug, Burm. Handb. Ent.* ii. 1, 156, 1.

## Genus 5. CLADODIPTERA.

*Cladodiptera*, *Spin. Ann. Soc. Ent. Fr.* viii. 346.

*Cladypha*, *Amyot et Serville.*

*Cladopteryx*, *Westwood.*

## 1. CLADODIPTERA MACROPHTHALMA.

*Cladodiptera macrophthalma*, *Spin. Ann. Soc. Ent. Fr.* viii. 318, pl. 13, f. 1.

*Cladypha macrophthalma*, *Amyot et Serv. Hist. Nat. Hém.* 503, 1. Brazil.

## 2. CLADODIPTERA SMARAGDULA, Mas et Fem.

*Ferruginea viridi guttata*; *metathorax viridis*; *abdomen mari, rufum fem. viride, nigro vittatum*; *pedes ferruginei*; *tibiae virides*; *alæ limpidæ fusco variae*; *alæ anticae apice fuscae.*

*Male.* Body ferruginous, smooth, shining: head much narrower than the chest; crown small, without a rim, its disk adorned with a bright green band; front and face yellowish-green, long, slightly concave along each side, widening towards the epistoma which is small: mouth ferruginous with a black tip, extending a little beyond the hind-hips: fore-chest short, very convex in front and equally concave behind, its disk bright green: scutcheon of the middle-chest adorned with seven bright green spots, of which one is at the tip, one on each side border, and two on each side of the disk which is grass-green and flat: hind-chest reddish-tawny, blackish on each side, adorned with a bright green tubercle on the fore border: abdomen obconical, reddish-tawny, a little longer than the chest.

with a row of black spots along the sides of the disk; sides vivid green: tip black: legs ferruginous, slender, furrowed; hind-shanks bright green, armed with spines: wings colourless; brand brown, occupying three areolets; a brown stripe extends from the tip of the wing along one-third of the hind border, and then becomes very slender, and is continued indistinctly towards the base; veins black, tawny towards the base where they are green.

*Fem.?* Duller than the male: abdomen grass-green with a black stripe which occupies all the tip, and tapers from thence to the base where it is slightly interrupted: brand dark brown, as is also the stripe which is almost confined to the tip of the wing.

The female may be a distinct species.

Length of the body 4—4½ lines; of the wings 12—13 lines.

a. Rio Janeiro. From Mr. Shuckard's collection.

b. Para. From Mr. Stevens' collection.

### Genus 6. ACHILUS.

*Achilus*, Kirby, *Trans. Linn. Soc.* xii. 47.

#### 1. ACHILUS FLAMMEUS.

*Achilus flammeus*, Kirby, *Trans. Linn. Soc.* xii. 474, pl. 23, f. 13.

*Spin. Ann. Soc. Ent. Fr.* viii. 320, 1. *Amyot et Serv. Hist. Nat. Hém.* 525, 1.

a, b. New Holland. From Mr. Lambert's collection.

c. New Holland.

#### 2. ACHILUS BICINCTUS.

*Achilus bicinctus*, *Spin. Ann. Soc. Ent. Fr.* viii. 321, 2.

South America.

### Genus 7. UGYOPS.

*Ugyops*, Guér. *Voy. Bélanger*, 477.

*Hygiops*, *Amyot et Serville*.

#### 1. UGYOPS PERCHERONI.

*Ugyops Percheroni*, Guér. *Voy. Bélanger*, 478. *Icon. Règn. Anim.*

*Ins.* pl. 58, f. 16. *Burn. Handb. Ent.* ii. 152, 1.

*Hygiops Percheronii*, *Amyot et Serv. Hist. Nat. Hém.* 512, 1.

Cochin China.

## Genus 8. CIXIUS.

*Cixius*, Latreille.  
*Flata*, Fabr. Germar.  
*Cixia*, Burmeister.  
*Delphax*, Fallen.

## 1. CIXIUS COLOMBIÆ, Mas.

*Fusco-fulvus*; *caput anticum carinatum*; *mesothorax tricarinatus*; *abdomen ferrugineum*; *pedes fulvi*; *alæ antice sublimpidæ, fusco et fulvo varicæ*; *alæ posticæ apice fusæ*.

Body tawny, partly brown: head much narrower than the chest; crown longer than broad, concave, conical in front, deeply notched on the hind border: front very narrow between the eyes, forming with the epistoma a fusiform compartment, which has a longitudinal ridge; mouth tawny, darker towards the tip, extending far beyond the hind-hips: fore-chest very short in the middle, widened and darker on each side, very slightly arched; its middle ridge rather indistinct: three ridges on the middle-chest, the side pair diverging towards the hind border: abdomen ferruginous, obconical, longer than the chest: legs tawny; two stout spines on the hind-shanks: fore-wings almost colourless, slightly tawny here and there, or with brown marks of which the largest is on the disk; brand tawny; veins tawny with brown dots which also occur on some of the areolets: hind-wings almost colourless, with brown tips; veins black. Length of the body 3 lines; of the wings 7 lines.

*a. Colombia.* From Mr. Turner's collection.

## 2. CIXIUS MUSIVUS.

*Flata musiva*, Germ. et Ahr. Faun. Eur. xi. 21. Germ. Thon, Arch. ii. 2, 49, 33. Herr.-Schäff. Nomencl. Ent. i. 64.

*Cixia musiva*, Burm. Handb. Ent. ii. 1, 158, 7.

Europe.

## 3. CIXIUS LEPORINUS.

*Cixius leporinus*, Latr. Gen. Crust. 111, 166. Costa, Faun. Règn. Nap. Ins. Emitt. *Cixius*, 4, 1. Panz. lxi. 19.

*Cicada leporina*, Linn. Faun. Suec. 895. Gmel. Ed. Syst. Nat. i. Faun. Ins. Germ. 4, 2114, 4?

*Flata leporina*, *Herr.-Schüff. Nomencl. Ent.* 1, 64.

*Pittostigma*, *Amyot, Ann. Soc. Ent. Fr. 2me Série*, v. 165.

a. England. Presented by J. C. Dale, Esq.

#### 4. CIXIUS PALLIDUS.

*Flata pallida*, *Herr.-Schüff. Nomencl. Ent.* 1, 64.

Germany.

#### 5. CIXIUS SIMPLEX.

*Flata simplex*, *Herr.-Schüff. Nomencl. Ent.* i. 64.

Germany.

#### 6. CIXIUS ALBICINCTUS.

*Cixius albicinctus*, *Latr. Gen. Crust.* 111, 166.

*Flata nervosa*, *Fabr. Syst. Rhyn.* 54, 47.

*F. albicincta*, *Germ. Mag.* iii. 199, 9. *Thon, Arch.* ii. 2, 49, 31.

*Herr.-Schüff. Nomencl. Ent.* i. 65.

*Delphax Cynosbatis*, *Fall. Act. Holm.* 1806, 126, 2.

*Cixia albicincta*, *Burm. Handb. Ent.* ii. 1, 158, 6.

*Diargetænia*, *Amyot, Ann. Soc. Ent. Fr. 2me Série*, v. 167, 392.

a, b. England. Presented by F. Walker, Esq.

#### 7. CIXIUS CUNICULARIS.

*Cixius cunicularis*, *Latr. Gen. Crust.* 111, 166.

*Cicada cunicularia*, *Linn. Syst. Nat.* i. 2, 711, 44.

*Flata cunicularia*, *Fabr. Syst. Rhyn.* 55, 48. *Panz. Faun. Ins.*

*Germ. Ed.* 2, xxxiv. 21. *Germ. Mag. Ent.* iii. 195, 6.

*Cercopis Dionysii*, *Panz. Faun. Germ.* 34, 24. ?

*Cixius Dionysii*, *Curt. Brit. Ent.* 673, 4.

*Cercopis nervoso-punctata*, *Deg. Ins.* iii. pl. 12, f. 1, 2.

*Delphax nervosa*, *Fall. Act. Holm.* 1806, 124, 1.

*Cixia cunicularia*, *Burm. Handb. Ent.* ii. 1, 157, 3.

*Dionysius*, *Amyot, Ann. Soc. Ent. Fr. 2me Série*, v. 165.

a—j. England.

k. France.

## 8. CIXIUS CONTAMINATUS.

- Cixius contaminatus*, *Latr. Gen. Crust.* 111, 166.  
*Flata contaminata*, *Germ. Mag.* iii. 196, 7. *Thon, Arch.* ii. 2, 49,  
 24. *Herr.-Schäff. Nomencl. Ent.* i. 65.  
*Cixia contaminata*, *Burm. Handb. Ent.* ii. 1, 157, 4.  
*Mianesthes*, *Amyot, Ann. Soc. Ent. Fr. 2me Série*, v. 165, 390,  
 a—z. England.

## 9. CIXIUS STIGMATICUS.

- Cixius stigmaticus*, *Latr. Gen. Crust.* 111, 166.  
*Flata contaminata*, *Germ. Mag.* iii. 199, 8. *Thon, Arch.* ii. 2, 49,  
 30. *Ahrens, Faun. Eur.* xi. 20. *Herr.-Schäff. Nomencl. Ent.* i. 65.  
*Fulgora pilosa*? *Oliv. Enc.* vi. 575, 41.  
*Cixius pilosus*? *Latr. Hist. Nat.* xii. 311, 4.  
*Cixia stigmatica*, *Burm. Handb. Ent.* ii. 1, 157, 5.  
 Europe.

## 10. CIXIUS NERVOSUS.

- Cixius nervosus*, *Latr. Gen. Crust.* iii. 166. *Burm. Handb. Ent.*  
 ii. 157, 2. *Amyot et Serr. Hist. Nat. Hém.* 508, 1. *Crochard*,  
*Ed. Règne, Anim. Ins.* pl. 97, f. 3.  
*Cicada nervosa*, *Linn. Syst. Nat.* i. 2, 709, 25. *Faun. Succ.* 882.  
*Fabr. Sp. Ins.* ii. 327, 35. *Mant. Ins.* ii. 272, 43. *Ent. Syst.*  
 iv. 42, 64. *Scop. Ent. Carn.* 341. *Fuessl. Ins. Helv.* 24, 459.  
*Deg. Ins.* iii. 182, 4, pl. 12, f. 1, 2. *Geoff. Ins.* i. 415, 1. *Gmel.*  
*Ed. Syst. Nat.* i. 3, 2105, 25. *Vill. Ent. Linn.* i. 460, 12.  
*Cicada Cynosbatis*, *Fabr. Ent. Syst.* iv. 41, 61.  
*Fulgora nervosa*, *Oliv. Enc.* vi. 575, 40. *Tign. Hist. Nat. Ins.* iii.  
 173, 1.  
*Flata nervosa*, *Fabr. Syst. Rhyn.* 54, 47. *Germ. Mag.* iii. 191, 5,  
 iv. 102, 3. *Thon, Arch.* ii. 2, 48, 27. *Herr.-Schäff. Nomencl.*  
*Ent.* i. 65.  
*F. Cynosbatis*, *Fabr. Syst. Rhyn.* 54, 45.  
*Cixia nervosa*, *Burm. Handb. Ent.* ii. 1, 157, 2.  
*Cixius*, *Amyot, Ann. Soc. Ent. Fr. 2me Série*, v. 164, 389.  
 a—h. England.

## 11. CIXIUS DORSALIS.

- Cixius dorsalis*, *Hardy, Proc. Tyne Nat. Field Club.*  
 England.



## 12. CIXIUS PALLENS.

*Flata pallens*, *Germ. Mag. Ent.* iv. 101, 2.

## 13. CIXIUS SERVILLEI.

*Cixius Servillei*, *Spin. Ann. Soc. Ent. Fr.* viii. 327.

## 14. CIXIUS ANCEPS.

*Flata anceps*, *Germ.*

Brazil.

## 15. CIXIUS BICARINATUS.

*Flata bicarinata*, *Fabr. Syst. Rhyn.* 52, 31. *Germ.*

Brazil.

## 16. CIXIUS VENUSTULUS.

*Flata venustula*, *Germ.*

Brazil.

## 17. CIXIUS SERIATUS.

*Flata seriata*, *Germ.*

Brazil.

## 18. CIXIUS GRAMMICUS.

*Flata grammica*, *Germ.*

Brazil.

## 19. CIXIUS BIPUNCTATUS.

*Cicada bipunctata*, *Linn. Syst. Nat.* ii. 710, 41. *Fabr. Sp. Ins.* ii. 323, 6. *Mant. Ins.* ii. 268, 6. *Ent. Syst.* iv. 28, 6. *Gmel. Ed. Syst. Nat.* i. 4, 2112, 41.

*Flata bipunctata*, *Fabr. Ent. Syst. Suppl.* 518, 7. *Syst. Rhyn.* 50, 22.

## 20. CIXIUS SULCIFRONS.

*Flata sulcifrons*, *Germ. Thon, Arch.* ii. 2, 48, 24.

*Cixia sulcifrons*, *Burm. Handb. Ent.* ii. 1, 158, 8.

Brazil.

## 21. CIXIUS ? QUINQUECOSTATUS.

*Cixius ? quinquecostatus*, Duf. Rech. Hém. 96.

Pentastira, Amyot, Ann. Soc. Ent. Fr. 2me Série, v. 167, 393.

South Europe.

## 22. CIXIUS VICARIUS, Mas.

*Ferrugineus ; caput fulvo-carinatum ; mesothorax quinquecarinatus, lateribus fuscus ; abdomen fuscum, apice fulvum, pedes fulvi, fusco subnotata ; alæ anticæ sublimpidæ ; venæ flavæ, fusco guttata ; venæ transversæ fusco nebulosæ ; alæ posticæ limpidæ.*

Very nearly allied to the European species, but apparently distinct. Body ferruginous: crown brown with two tawny ridges which are forked in front and inclose with the cross-ridge two little triangular compartments; front brown, as long as the epistoma, with which it forms a spindle-shaped compartment, the latter is striated across, and has a tawny rim and a tawny middle ridge which is forked near the crown: mouth tawny with a black tip, reaching beyond the hind-hips: fore-chest very short: middle-chest with five distinct ridges, brown on each side: abdomen brown, obconical, not longer than the chest; tip tawny: legs tawny, grooved, slightly marked with brown; hind-shanks armed with three small teeth: wings nearly colourless; brand brown; vein pale yellow, adorned with rows of brown dots; cross-veins clouded: hind-wings colourless; veins brown. Length of the body  $2\frac{1}{4}$  lines; of the wings 6 lines.

a. St. John's Bluff, Florida. Presented by E. Doubleday, Esq.

## 23. CIXIUS MACULIFRONS, Fem.

*Fuscus ; caput flavo varium, subtus albo bimaculatum ; mesothorax carinis quinque ferrugineis ornatum, apice fulvum ; abdomen fulvo-fasciatum ; pedes fulvi ; femora fusca ; alæ anticæ sublimpidæ apice subfusca ; venæ flavæ, fusco guttata ; venæ transversæ fusco nebulosæ ; alæ posticæ limpidæ.*

Body brown: on each side of the crown a rather high ridge which has a yellow hind border and a yellow spot on its disk, and is forked towards its fore border and incloses a little triangular compartment by means of the cross-ridge above the front; the latter with the epistoma is almost spindle-shaped, and has a slight middle ridge and a white spot on each side where it is indistinctly angular; front a little shorter than the epistoma: mouth tawny with a black

tip, reaching beyond the hind-hips: fore-chest very short; five ferruginous ridges on the middle-chest whose tip is tawny: abdomen obconical, not longer than the chest; hind borders of the segments tawny: oviduct tawny, slender, projecting beyond the abdomen to half the length of the latter: legs pale tawny; thighs mostly brown; a single spine on each hind-shank: fore-wings almost colourless, pale brown at the tips: cross-veins clouded with brown; veins pale yellow, adorned with rows of very numerous little brown dots: hind-wings colourless; veins black. Length of the body 2 lines; of the wings 6 lines.

*a, b.* Sierra Leone. Presented by the Rev. F. D. Morgan.

#### 24. CIXIUS TESTACEUS, Fem.

*Testaceus; capitis vertex flavo bimaculatus; mesothorax quinque-carinatus, disco subfulvus; abdomen flavo fasciatum, apice albo lanuginosum; pedes fulvi; alae anticae fuscae, apice fulvae aut limpidae; venae flavae guttis fuscis setiferis ornatae; alae posticae sublimpidae.*

Body testaceous: a high ridge bearing a yellow spot on each side of the crown; front and epistoma forming an almost spindle-shaped compartment which is indistinctly angular on each side, has a tawny middle ridge, and on each side near the base of the epistoma an angular yellow streak; front a little shorter than the epistoma: fore-chest very short: five ridges on the middle-chest whose disk is almost tawny: abdomen a little longer than the chest; its tip thickly clothed with long white filaments: hind borders of the segments yellow beneath: legs tawny, grooved; hind-shanks armed with three spines: fore-wings brown, tawny and partly colourless towards the tips; brand brown; veins pale yellow, adorned with rows of very numerous little brown dots, each of which bears a bristle; a few cross-veins close some of the areolets towards the tip: hind-wings almost colourless. Length of the body 3 lines; of the wings 7 lines.

#### 25. CIXIUS LATIFRONS, Mas.

*Niger; caput fulvo cinctum, subtus flavo bimaculatum; mesothorax tricarinatus; abdomen flavo fasciatum; pedes flavi; femora fusca; tibiae fusco subvittatae; alae anticae flavo-subfuscae.*

Body black: crown surrounded by a tawny border which has a slight ridge on each side, and is rounded in front and notched be-

hind; front widening considerably from the crown, closely united to the epistoma which it exceeds in length; the two form a broad spindle-shaped scutcheon which is finely striated across, and has a tawny middle ridge and a tawny border, the latter has a yellow spot on each side of the widest part: mouth tawny with a black tip, reaching the hind-hips: fore-chest short: three slight ridges on the middle-chest: abdomen obconical, not longer than the chest; hind borders of the segments yellow: legs yellow; thighs mostly brown; shanks slightly striped with brown; hind-shanks armed with three small teeth: wings pale yellowish-brown; brand a little darker; veins tawny, darker towards the tips; six discoidal areolets. Length of the body  $1\frac{1}{2}$  lines; of the wings 5 lines.

#### 26. CIXIUS AUSTRALIS, Fem.

*Fuscus; epistoma ferrugineum; mesothorax subcarinatus; abdomen subtus basi fulvum, pedes fulvi; alæ anticæ subfuscae, apice fusco maculatæ; alæ posticæ sublimpidæ.*

Body brown: a slight ridge on each side of the crown: front much longer than the epistoma, with which it forms a nearly elliptical compartment; middle ridge and epistoma ferruginous: fore-chest very short: middle-chest slightly ridged: abdomen obconical, not longer than the chest, tawny beneath towards the base: legs tawny, slightly grooved; hind-shanks unarmed: fore-wings pale brown, adorned towards the tips with brown spots, one on the disk of each areolet; brand dark brown; veins brown, black towards the tips: hind-wings almost colourless; veins black. Length of the body 2 lines; of the wings 5 lines.

a. Port Natal. From Mr. Guenzius' collection.

#### 27. CIXIUS OPPOSITUS, Fem.

*Niger; caput fulvo vittatum; prothoracis latera fulva; mesothorax ferrugineo quinque-vittatus; abdomen flavo vittatum; pedes fulvi; alæ anticæ subfulvæ, stigma flavum, ad partem fuscum; venæ flavæ, fusco guttatæ; venæ transversæ fuscae; alæ posticæ sublimpidæ.*

Body black: crown of the head surrounded by a tawny ridge, which incloses a nearly conical compartment and is divided in front by a parallel cross-ridge; front much longer than the epistoma; the two forming a nearly elliptical compartment which is finely ridged

across, and has a tawny border and a tawny middle ridge, the latter is forked near the crown: mouth tawny with a black tip reaching beyond the hind-hips: feelers tawny: fore-chest very short, with tawny borders: five slight ferruginous ridges on the middle-chest, the inner pair very slightly curved: abdomen obconical, not longer than the chest; hind borders of the segments yellow: legs tawny, slightly grooved; hind-shanks armed with three spines: fore-wings tinged with pale dull tawny; brand yellow with a broad brown hind border; veins pale yellow, adorned with rows of very numerous brown dots; cross-veins brown: hind-wings almost colourless; veins black. Length of the body  $1\frac{1}{4}$ — $1\frac{3}{4}$  line; of the wings 4—5 lines.

a—c. New Zealand. Presented by Dr. Hooker.

## 28. CIXIUS RUFIMACULA, Mas.

*Luteus; caput nigro maculatum; prothorax nigro cinctus et univittatus; mesothorax nigro carinatus et utrinque vittatus; pectus nigro maculatum; abdomen nigro fasciatum; lateribus rufum; pedes fulvi, subtus flavi; alæ anticæ subfulvæ; alæ posticæ limpide.*

This species has some affinity to *Delphax*, but its feelers are those of *Cixius*. Body luteous: crown of the head crescent-shaped, surrounded by a rim and having a triangular black spot in the middle; front slightly widening from the crown to the epistoma, which is triangular and hardly half the length of the former; three black stripes extend along half the length of the epistoma from the crown and occupy the ridges which are rather broad: fore-chest much longer than usual, hardly shorter than the head, nearly surrounded by a black border and having a black middle ridge: middle-chest black along each side, and having three very distinct black ridges, the side pair slightly curved: several black spots on the breast: abdomen obconical, shorter than the chest, slightly banded with black, having a short bright red stripe on each side: legs tawny, hairy, yellow beneath; hind-shanks armed with three spines: fore-wings pale dull tawny; four discoidal areolets; veins brown; marginal vein tawny, bristly: hind-wings colourless; veins black, beset with a few bristles. Length of the body 2 lines; of the wing 6 lines.

a. Columbia. From M. Jurgens' collection.

## 29. CIXIUS LONGIPENNIS, Fem.

*Ferrugineus, fulvo vittatus; abdomen subtus luteum; pedes fulvi; alæ longæ, sat angustæ; alæ anticæ sublimpidæ, apice fusco maculatæ; venæ flavæ, fusco nodosæ et maculatæ; alæ posticæ limpidæ.*

Body ferruginous: crown of the head short, with a ridge on each side; front forming with the epistoma a spindle-shaped compartment which has a tawny ridge along the middle and a tawny rim on each side: mouth tawny: fore-chest very short: three ridges on the middle-chest whose disk is flat: abdomen obconical, a little longer than the chest, luteous beneath: legs tawny: wings very long and rather narrow, almost colourless, with a few brown spots on the disks of the arcolelets near the tips; veins pale yellow, dotted with very minute brown knots, adorned with spindle-shaped brown spots, parted by generally equal distances; brand yellow: hind-wings colourless; veins brown. Length of the body 2 lines; of the wings 7 lines.

a. Port Natal. From M. Guenzius' collection.

## 30. CIXIUS ALBIDUS, Mas.

*Fulvus, albo furinosus; mesothorax subcarinatus; pedes flavi; alæ albide.*

Body tawny, powdered with white: front full twice the length of the epistoma, with which it forms a nearly spindle-shaped compartment, the latter is slightly ridged: fore-chest very short: middle-chest slightly ridged: abdomen obconical, not longer than the chest: legs yellow, slender, hardly grooved; hind-shanks unarmed: wings whitish; fore-wings a little darker than the hind-wings; veins tawny; very few discoidal arcolelets. Length of the body 1 line; of the wings  $3\frac{1}{2}$  lines.

a. Sierra Leone. Presented by the Rev. D. F. Morgan.

## 31. CIXIUS OBSCURUS, Mas.

*Fuscus; pedes fulvi; alæ anticæ subfuscæ, fusco ad apices notatæ; arcoleæ discoidales sex; alæ posticæ subcinereæ.*

Body brown: front and epistoma forming a spindle-shaped compartment which is surrounded by a ferruginous rim and divided by a ferruginous ridge; the side compartments are partly tawny and

less than half the breadth of the middle one; epistoma ferruginous: mouth tawny: antennæ ferruginous: fore-chest convex in front, concave behind: abdomen obconical, not longer than the chest: legs tawny, slightly grooved: fore-wings pale brown, adorned towards the tips with many dark brown marks, generally one on each areolet; basal part occupying two-thirds of the length of the wing, with six longitudinal veins, two of which are forked; five or six discoidal areolets in the reticulated part; veins dark brown; hind-wings pale gray; veins black. Length of the body  $1\frac{1}{2}$  line; of the wings 4 lines.

a. Port Natal. From M. Gueinzus' collection.

### 32. CIXIUS FLAVISIGNA, Mas.

*Fuscus, vitta antica dorsali flava ornatus; abdomen fulvo fasciatum; pedes fusci, flavo fasciati: alæ anticae fulvæ, fusco guttatae; venæ fusco fulvoque fasciatae; alæ posticae fusco cineræ.*

Body brown: crown of the head yellow; front and epistoma adorned with numerous tawny dots, together spindle-shaped, divided by a ridge into two long narrow compartments which are slightly concave; each side compartment alike in shape and size to each middle one, adorned with a large yellow spot; front slightly widening from the crown to the epistoma, the latter tapering to the mouth which is tawny with a brown tip, and extends a little beyond the hind-hips: fore-chest very convex in front, slightly excavated on the hind border; slightly ridged along the disk which is adorned with a large conical bright yellow spot; a few tawny dots on each side: a rhomboidal bright yellow spot on the middle-chest, which has three ridges, the side pair diverging towards the hind border; each side adorned with a yellow stripe whose inner edge is excavated: hind-chest partly tawny: abdomen obconical, not longer than the chest, paler beneath, where the hind borders of the segments are tawny: legs brown, grooved; thighs and shanks adorned with yellow bands: fore-wings tawny, varied with very numerous small brown marks which are often confluent and occupy almost the whole surface at the base and at the tips; structure of the veins alike along the whole length; veins adorned with alternate brown and tawny bands: hind-wings grayish, brown towards the tips and along the hind border; veins black. Length of the body  $2\frac{1}{2}$  lines; of the wings 7 lines.

a. North India. From Mr. Warwick's collection.

## 33. CIXIUS MEANDER.

*Fulvus, thoracis discus fuscus; pedes fulvi; femora fusco bifasciata; alæ antice sublimpida, fusco-undatæ, ad costam flavo unimaculatæ; nervi straminei, nigro guttati.*

Body tawny: front long and narrow, with a row of brown spots along each side of the disk which is also brown: mouth tawny: eyes large; fore-chest with three oblique ridges on each side: disk of the middle-chest brown: abdomen wanting: legs tawny, slightly grooved; two brown bands on each thigh: fore-wings almost colourless, adorned with several brown waved bands which are partly confluent or interrupted; the disks of the spaces between them are occupied by paler brown bands; a large yellow spot on the fore border; veins pale straw-colour, thickly dotted with black knots; structure of the vein alike along the whole length, very few cross-veins: hind-wings wanting. Length of the body 2 lines; of the wings 5 lines.

a. East India. From Archdeacon Clerk's collection.

Var.? *Niger, flavo vittatus, caput subtus scutellum et pectus flava; pedes nigri; tibiæ ferruginæ; alæ nigro-fuscae, basi flavae, ad costam fulvo vittatæ.*

Body black, dull: head as broad as the fore-wing near the base: crown with a rim along each side and behind, where it is angular and ferruginous; two oblique ridges join the middle longitudinal ridge beyond half its length and enclose with it and the hind border two triangular compartments; a slight longitudinal ridge on the front which is widened on each side and rather longer than broad; epistoma yellow, triangular, black towards the base: mouth brown, reaching beyond the middle-hips: fore-chest large, broader than long, with three distinct nearly parallel ridges, yellow along each side: middle-chest yellow, small, triangular: breast yellow, bright tawny on each side: abdomen obconical, not longer than the chest: legs black, slightly grooved, rather slender; shanks ferruginous: hind-shanks unarmed: fore-wings blackish-brown, bright yellow at the base; a long tawny stripe on the fore border ending in a white cross streak, opposite to which on the hind border there is a white cruciform mark; veins black; six longitudinal veins reaching the tip, two cross-veins in the disk, four nearer the tip, and three or four on the fore border beyond the tawny stripe: hind-wings brown. Length of the body 2 lines; of the wings 6 lines.

a. Para. From Mr. Stevens' collection.



## Genus 9. ALLELOPLASIS.

Alleloplasis, *Waterhouse, Trans. Ent. Soc. Lond.* ii. 194.

## 1. ALLELOPLASIS DARWINII.

Alleloplasis Darwinii, *Waterhouse, Trans. Ent. Soc. Lond.* ii. 194,  
pl. 17, f. 4.

Australia.

## Genus 10. DELPHAX.

Delphax, *Fabr. Syst. Rhyn.* 83.

Fulgora, *Fabr.*

Criomorphus, *Curtis* (ad partem).

## 1. DELPHAX MINUTA.

Delphax minuta, *Fabr. Syst. Rhyn.* 84, 10. *Coqueb. Ill.* pl. 21, f. 4.  
*Guér. Icon. Régn. Anim. Ins.* pl. 58, f. 17.

Fulgora minuta, *Fabr. Mant. Ins.* ii. 262, 20. *Ent. Syst.* iv. 6, 20.  
*Gmel. Ed. Syst. Nat.* i. 4, 2091, 20.

Delphax lineola, *Germ. Mag. Ent.* iii. 209, 1. *Ahrens, Faun.* vii.  
19. *Herr.-Schäff. Nomencl. Ent.* i. 65.

Delphax, *Amyot, Ann. Soc. Ent. Fr. 2me Série*, v. 170, 396.

a—d. England. Presented by F. Walker, Esq.

e. Rhenish Prussia. Presented by E. Doubleday, Esq.

## 2. DELPHAX LIMBATA.

Fulgora limbata, *Fabr. Ent. Syst.* iv. 6, 21.

Delphax limbata, *Fabr. Syst. Rhyn.* 84, 5. *Germ. Mag. Ent.* iii.  
211, 2. *Thon, Arch.* ii. 2, 57, viii. 2. *Herr.-Schäff. Nomencl.*  
*Ent.* i. 65. *Ahrens, Faun. Ins.* xv. pl. 14. *Burm. Handb. Ent.*  
ii. 1, 150, 1. *Boh. Kongl. Vet. Acad. Handl.* 1845, 60, 31.

D. anceps, *Germ. Mag. Ent.* iii. 211, 2, iv. 105, 10.

Delphax signifera, *Boh. Vet. Acad. Ofvers*, 164, 30.

Nehigla, *Amyot, Ann. Soc. Ent. Fr. 2me Série*, v. 171, 39.

Europe.

## 3. DELPHAX NOTULA.

Delphax notula, *Germ. Thon, Arch. Herr.-Schäff. Nomencl. Ent.*  
i. 66.

D. striata, *Fall. Act. Holm.* 1806, 129.

D. striatella, *Fall. Act. Holm.* 1806, 129.

Europe.

## 4. DELPHAX UNICOLOR.

*Delphax unicolor*, *Herr.-Schüff. Nom. Ent.* 66. *Faun. Ins. Germ.* 143, 19.

Europe.

## 5. DELPHAX PELLUCIDA.

*Delphax pellucida*, *Fabr. Syst. Rhyn.* 84, 6. *Fall. Act. Holm.* 1806, 129, 5. *Hém. Succ.* 1829, 76, 4. *Germ. Mag.* iii. 212, 3. *Thon, Arch.* iii. *Duméril, Cons. Gen. Ins.* 219, pl. 38, f. 7. *Zett. Faun. Ins. Lapp.* i. 548, 2. *Ins. Lapp.* 305, 2.

*Fulgora pellucida*, *Fabr. Ent. Syst.* iv. 7, 22.

*Delphax hemiptera*, *Germ. Mag. Ent.* iii. 217, 8. *Thon, Arch.* ii. 2, 57, 10. *Zett. Faun. Ins. Lapp.* 549, 4. *Ins. Lapp.* 306, 4. *Burm. Handb. Ent.* ii. 1, 151, 3. *Schaum, Allg. Enc. Wissench.* i. 51, 69, 8.

*Delphax venosa*, *Germar.*

a. England. Presented by F. Walker, Esq.

b. Rhenish Prussia. Presented by E. Doubleday, Esq.

c—p. (Pupæ ?) England. Presented by F. Walker, Esq.

## 6. DELPHAX DISPAR.

*Delphax dispar*, *Fall. Act. Holm.* 1806, 126, 3. *Hém.* 74, 2. *Zett. Faun. Ins. Lapp.* i. 548, 1. *Ins. Lapp.* 305, 1. *Herr.-Schüff. Nomencl. Ent.* i. 66.

*Fulgora flavescens*, *Fabr. Ent. Syst.* iv. 7, 23.

*Delphax flavescens*, *Fabr. Syst. Rhyn.* 84, 7. *Germ. Mag.* iii. 213, 4. *Amyot et Serv. Hist. Nat. Hém.* 512, 1. *Crochard, Ed. Régén. Anim. Ins.* pl. 97, f. 9.

*Fulgora marginata*, *Fabr. Ent. Syst.* iv. 7, 25.

*Delphax marginata*, *Fabr. Syst. Rhyn.* 84, 9. *Germ. Mag. Ent.* iii. 215, 6. *Thon, Arch.* ii. 257, viii. 4. *Burm. Handb. Ent.* ii. 1, 150, 2.

*Fulgora striata*, *Fabr. Ent. Syst.* iv. 7, 24.

*Delphax striata*, *Fabr. Syst. Rhyn.* 84, 8. *Germ. Mag. Ent.* iii. 215, 5.

*Cicada dispar*, *Panz. Faun. Ins.* 35, 19 (Mas.), 20 (Fem.)

*Carphograptus*, *Amyot, Ann. Soc. Ent. Fr. 2me Série*, v. 170, 398.

*Javesa*, *Amyot, Ann. Soc. Ent. Fr. 2me Série*, v. 172, 400.

a—g. England. Presented by F. Walker, Esq.

h. Scotland. Presented by R. N. Greville, Esq.

i. Rhenish Prussia. Presented by E. Doubleday, Esq.

j—t. (Larvæ and Pupæ ?) England. Presented by F. Walker, Esq.

## 7. DELPHAX GUTTULA.

*Delphax minuta*, *Fall. Act. Holn.* 1806, 129, 6. *Zett. Faun. Ins. Lapp.* i. 549, 3. *Ins. Lapp.* 305, 3.

*Delphax guttula*, *Germ. Mag.* iii. 216, 7. *Curt. Brit. Ent.* 657, 10.

*a.* England. Presented by F. Walker, Esq.

*b, c.* Rhenish Prussia. Presented by E. Doubleday, Esq.

## 8. DELPHAX STIGMATICALIS.

*Delphax stigmatalis*, *Lewis, Curt. Brit. Ent.* 657, 11.

## 9. DELPHAX LONGIPENNIS.

*Delphax longipennis*, *Curt. Brit. Ent.* 657, 1.

England.

## 10. DELPHAX SUTURALIS.

*Delphax suturalis*, *Curt. Brit. Ent.* 657, 5.

England.

## 11. DELPHAX BASILINEA.

*Delphax basilinea*, *Germ. Mag. Ent.* iv. 105, 9. *Thon, Arch.* 1. *Herr.-Schüff. Nomencl. Ent.* i. 65.

Europe.

## 12. DELPHAX UNICOLOR.

*Delphax unicolor*, *Herr.-Schüff. Nomencl. Ent.* i. 68.

Europe.

## 13. DELPHAX PICTIPENNIS.

*Delphax pictipennis*, *Curt. Brit. Ent.* 657, 7.

*a—d.* England. Presented by F. Walker, Esq.

## 14. DELPHAX PTERIDIS.

*Delphax Pteridis*, *Géné, MSS. Spin. Ann. Soc. Ent. Fr.* viii. 334, 6. Sardinia.

## 15. DELPHAX LEPTYCHUS.

*Delphax Leptyphus.*

*Leptyphus*, Amyot, *Ann. Soc. Ent. Fr. 2me Série*, v. 170, 397.

Europe.

## 16. DELPHAX BICARINATA.

*Delphax bicarinata*, Herr.-Schaff. *Nomencl. Ent.* i. 66, 106. *Faun. Ins. Germ.* 143, 21. *Spin. Ann. Soc. Ent. Fr.* viii. 334, 5.

Europe.

## 17. DELPHAX SACCHARIVORA.

*Delphax saccharivora*, Westwood, *Mag. Nat. Hist.* vi. 407.

*a, b.* New Granada. Presented by the Entomological Club.

*c—t.* Jamaica.

## 18. DELPHAX TRICARINATA.

*Delphax tricarinata*, Say, *Journ. Acad. Philad.* iv. 337.

United States.

## 19. DELPHAX PRODUCTA, MRS.

*Ferruginea*; *verticis latera elevata*; *frons carinatus*; *mesothorax fulvo trivittatus*; *pectus albidum*; *pedes fulvi*; *alæ subfulvæ, longæ, angustæ, apice obscuriores.*

Body ferruginous: head much narrower than the chest; crown a little longer than broad, with a high ridge along each side; front increasing in breadth from the crown till near the epistoma where it is rounded, its length near twice its breadth, its middle ridge continued along the epistoma which is lanceolate: fore-chest shorter than the crown, very conical in front, slightly concave on the hind border: middle-chest more than twice the length of the fore-chest, with three tawny stripes: breast whitish: abdomen obconical, not longer than the chest: legs tawny: wings pale tawny, long and narrower, darker towards the tips; veins tawny. Length of the body 2 lines; of the wings 6 lines.

*a.* Jamaica. From Mr. Gosse's collection.

## 20. DELPHAX LUTEIVITTA, Mas.

*Straminea*; *caput anticum productum, conicum*; *frons nigra stramineo striata*; *prothorax tristriatus, luteo bivittatus*; *abdomen nigrum flavo fasciatum*; *pedes fulvi*; *alæ limpidae*.

Body straw-colour: head produced in front, conical; crown narrow in front, notched on the hind border, its length exceeding its breadth; front black, very narrow, bordered with pale straw-colour, adorned with two ridges of the same colour which are united towards the epistoma: fore-chest broader than long, three-ridged, adorned with two bright luteous stripes: middle-chest small, triangular: abdomen black, obconical, not longer than the chest; hind borders of the segments pale yellow: legs pale tawny: wings colourless; veins pale tawny: fore borders of the fore-wings darker towards the tips. Length of the body  $\frac{3}{4}$  line; of the wings  $2\frac{1}{2}$  lines.

*a.* United States. Presented by E. Doubleday, Esq.

## 21. DELPHAX SUBSTITUA, Fem.

*Fusca*; *thorax tricarinatus*; *mesothorax fulvo trivittatus*; *abdomen apice fulvum*; *pedes fulvi*; *alæ limpidae*.

Body brown: head wanting: fore-chest with three ridges; the side pair diverging to the hind border, its length about one-fourth of its breadth: three very slight almost parallel tawny ridges on the middle-chest which is about thrice the length of the fore-chest, and is angular towards the tip, the latter is tawny: breast dull tawny: abdomen obconical, longer than the chest, tawny at the tip: legs tawny; hind-shanks unarmed: wings colourless; veins tawny. Length of the body 1 line; of the wings  $2\frac{1}{2}$  lines.

*a.* Charles Island, Galapagos. Presented by C. Darwin, Esq.

## 22. DELPHAX UNICOLOR, Mas.

*Flavo-fusca, subtus fulva*; *pedes fulvi*; *alæ perbreves, anticae fuscae, posticae limpidae*.

Body yellowish-brown, tawny beneath: front tawny, hardly longer than broad, punctured along each side; epistoma yellow, triangular, as long as the front: mouth tawny: abdomen obconical, not longer than the chest: legs tawny: wings very short; fore-wings

brown ; hind-wings colourless. Length of the body  $1\frac{1}{2}$  line ; of the wings 2 lines.

a. Hudson's Bay. Presented by G. Barnston, Esq.

### 23. DELPHAX VICARIA, Mas.

*Fulva ; thorax tricarinatus ; pedes flavi ; alæ perbreves subfulvæ apice fuscæ, ad marginem posticum fusco maculatæ.*

Body tawny : head narrower and darker than the chest ; ridges of the crown forming a triangle which is intersected by a more slight ridge ; front narrow, forming with the epistoma a long spindle-shaped compartment which has three yellow ridges : mouth tawny with a black tip, reaching the hind-hips : fore-chest little longer than the crown, with three ridges, the side pair diverging towards the hind border, slightly curved : middle-chest much longer than the fore-chest, with three ridges, the side pair straight, much diverging ; hind border produced into an angle which is pale : abdomen obconical, a little longer than the chest, legs pale yellow ; a single spine on each hind-shank : wings with an indistinct tawny tinge, brown along the tips, and with a brown spot on the hind border beyond the middle ; veins pale yellow. Length of the body 1 line ; of the wings  $1\frac{1}{2}$  line.

a. Charles Island, Galapagos. Presented by C. Darwin, Esq.

b. Pupa ? James Island. Presented by C. Darwin, Esq.

### 24. DELPHAX SIMULANS, Mas.

*Fulva ; caput flavo vittatum ; thorax tricarinatus ; abdominis latera nigra ; pedes fulvi ; femora fusca ; alæ limpidæ, perbreves.*

Body dull dark tawny : head narrower than the chest ; ridges of the crown forming a triangle ; front large, forming with the eyes and epistoma a triangle which has a yellow rim on each side and a yellow middle stripe, the front has also two more longitudinal yellow stripes which slightly converge at each end : mouth tawny, reaching the hind-hips : fore-chest a little longer than the crown, rounded in front, with three ridges, the side pair much diverging : the middle-chest has three similar ridges, is much longer than the fore-chest, and its hind border is produced into an angle : abdomen obconical, longer than the chest, more or less black on each side, especially in the pupa state : legs tawny ; thighs brown ; a single spine on each

hind-shank: wings colourless, not reaching the tip of the abdomen; veins tawny. Length of the body  $\frac{3}{4}$ —1 line; of the wings 1—1 $\frac{1}{2}$  line.

*a, b.* Charles Island, Galapagos. Presented by C. Darwin, Esq.

*c—i.* James Island. Presented by C. Darwin, Esq.

25. DELPHAX ——— ? (Larva and Pupa).

*a, b.* James Island, Galapagos. Presented by C. Darwin, Esq.

26. DELPHAX ALBOMARGINATA.

*Criomorphus albomarginatus* (Pupa), *Curt. Ent. Mag.* i. 195, 3.

*a, b.* England. Presented by F. Walker, Esq.

*c.* England.

27. DELPHAX ——— ? Pupa.

*a—g.* England. Presented by F. Walker, Esq.

*h.* Isle of Jersey. Presented by F. Walker, Esq.

28. DELPHAX ——— ? Pupa.

*a—c.* England. Presented by F. Walker, Esq.

29. DELPHAX RIVULARIS.

*Delphax rivularis*, *Germer.*

30. DELPHAX SPECIOSA.

*Delphax speciosa*, *Boh. Vet. Acad. Ofvers*, 1845, 165, 29. *Nya Svenska Homoptera, Kongl. Vet. Acad. Handl.* 1845, 59, 30.

Sweden.

31. DELPHAX PERSPICILLATA.

*Delphax perspicillata*, *Boh. Vet. Acad. Ofvers*, 1845, 164, 31. *N. S. H., Kongl. Vet. Acad. Handl.* 1845, 62, 32.

Sweden.

## 32. DELPHAX LEPIDA.

*Delphax lepida*, *Boh. Vet. Acad. Ofvers.* 1847, 265, 8. *Kongl. Vet. Acad. Handl.* 1847, 39, 10.

Sweden.

## 33. DELPHAX NASALIS.

*Delphax nasalis*, *Boh. Kongl. Vet. Acad. Handl.* 1847, 41, 11.

Sweden.

## 34. DELPHAX LONGIFRONS.

*Delphax longifrons*, *Boh. Kongl. Vet. Acad. Handl.* 1847, 42, 12.

Sweden.

## 35. DELPHAX MUTABILIS.

*Delphax mutabilis*, *Boh. Kongl. Vet. Acad. Handl.* 1847, 43, 13.

Sweden.

## 36. DELPHAX HAMATA.

*Delphax hamata*, *Boh. Kongl. Vet. Acad. Handl.* 1847, 45, 14.

Sweden.

## 37. DELPHAX TRUNCATIPENNIS.

*Delphax truncatipennis*, *Boh. Vet. Acad. Ofvers.* 1847, 266, 12.  
*Kongl. Vet. Acad. Handl.* 1847, 46, 15.

Sweden.

## 38. DELPHAX PALLIDULA.

*Delphax pallidula*, *Boh. Vet. Acad. Ofvers.* 1847, 265, 9. *Kongl. Vet. Acad. Handl.* 1847, 48, 16.

Sweden.

## 39. DELPHAX BREVIPENNIS.

*Delphax brevipennis*, *Boh. Vet. Acad. Ofvers.* 1847, 266, 10. *Kongl. Vet. Acad. Handl.* 1847, 49, 17.

Sweden.



## 40. DELPHAX COLLINA.

Delphax collina, *Boh. Kongl. Vet. Acad. Handl.* 1847, 51, 18.  
Sweden.

## 41. DELPHAX RANICEPS.

Delphax raniceps, *Boh. Kongl. Vet. Acad. Handl.* 1847, 52, 19.  
Sweden.

## 42. DELPHAX OBSCURELLA.

Delphax obscurella, *Boh. Kongl. Vet. Acad. Handl.* 1847, 53, 20.  
Sweden.

## 43. DELPHAX LUGUBRINA.

Delphax lugubrina, *Boh. Vet. Acad. Officers*, 1847, 266, 11. *Kongl. Vet. Acad. Handl.* 1847, 55, 21.  
Sweden

## 44. DELPHAX PALLIATA.

Delphax palliata, *Boh. Vet. Acad. Officers*, 1847, 266, 13. *Kongl. Vet. Acad. Handl.* 1847, 56, 22.  
Sweden.

## 45. DELPHAX FORCIPATA.

Delphax forcipata, *Boh. Kongl. Vet. Acad. Handl.* 1847, 57, 23.  
Sweden.

## 46. DELPHAX MÆSTA.

Delphax mæsta, *Boh. Kongl. Vet. Acad. Handl.* 1847, 59, 24.  
Sweden.

## 47. DELPHAX TRISTIS.

Delphax tristis, *Boh. Kongl. Vet. Acad. Handl.* 1847, 60, 25.  
Sweden.

## 48. DELPHAX DISCOLOR.

*Delphax discolor*, *Boh. Kongl. Vet. Acad. Handl.* 1847, 61, 26.  
Sweden.

## 49. DELPHAX ELEGANTULA.

*Delphax elegantula*, *Boh. Kongl. Vet. Acad. Handl.* 1847, 63, 27.  
Sweden.

## 50. DELPHAX DENTICAUDA.

*Delphax denticauda*, *Boh. Kongl. Vet. Acad. Handl.* 1847, 64, 28.  
Sweden.

## 51. DELPHAX EXIGUA.

*Delphax exigua*, *Boh. Kongl. Vet. Acad. Handl.* 1847, 65, 29.  
Sweden.

## Genus 11. ARCEOPHUS.

*Arceophus*, *Spin. Ann. Soc. Ent. Fr.* viii. 336.

*Delphax*, *Fabr.*

*Cicada*, *Panz.*

*Asiraca*, *Latr. Creutz, Germar, Burmeister, Curtis.*

## 1. ARCEOPHUS CRASSICORNIS.

*Asiraca crassicornis*, *Creutz, Germ. Mag.* iii, 215, 4. *Thon, Arch.*  
ii, 2, 57, 7. *Burm. Handb. Ent.* ii, 1, 151, 2.

*Arceophus crassicornis*, *Spin. Ann. Soc. Ent. Fr.* viii. 336.

*Delphax crassicornis*, *Fabr. Ent. Syst. Suppl.* 522, 1.

*Cicada crassicornis*, *Panz. Faun. Germ.* 35, pl. 19.

*Asiraca crassicornis*, *Latr. Gen.* iii. 168.

*Asiraca pulchella*, *Curt. Brit. Ent.* x. 445, 3.

*Asiraca dubia*, *Creutz. Panz. Faun. Germ.* 35, 20. *Curt. Brit. Ent.*  
x. 445, 2.

*Asiraca grisea*, *Latr.*

*a.* England. Presented by F. Walker, Esq.

## 2. ARGEOPUS? CYLINDRICORNIS.

*Asiraca cylindricornis*, *Latr. Gen.* iii. 167, 2.

*Delphax cylindricornis*, *Fabr. Syst. Rhyn.* 83, 3.

South America.

## 3. ARGEOPUS? OPPOSITUS.

*Delphax opposita*, *Fabr. Syst. Rhyn.* 84, 4.

South America.

## Genus 12. ASIRACA.

*Asiraca*, *Latr. Gen. Crust.* iii. 167.

*Cicada*, *Fabr., Coquebert.*

*Delphax*, *Fabr.*

## 1. ASIRACA CLAVICORNIS.

*Asiraca clavicornis*, *Latr. Gen. Crust.* iii. 167, 1. *Germ. Mag.* iii. 205, 4. *Thon, Arch.* ii. 2, 57, 8. *Curt. Brit. Ent.* x. 445, 1. *Guér. Icon. Régn. Anim. Ins.* pl. 58, f. 15. *Burm. Handb. Ent.* ii. 1, 151, 1. *Spin. Ann. Soc. Ent. Fr.* viii. 337. *Blanch. Hist. Nat. Ins.* iii. 176, 1. *Crochard, Ed. Régn. Anim. Ins.* pl. 97, f. 8.

*Cicada clavicornis*, *Fabr. Ent. Syst.* iv. 41, 62. *Coq. Illustr. Icon.* i. 33, pl. 8, f. 7.

*Delphax clavicornis*, *Fabr. Syst. Rhyn.* 83, 1.

*Asiraca*, *Amyot, Ann. Soc. Ent. Fr. 2me Série*, v. 168, 395.

a—d. England.

e. Sicily. From Mr. Melly's collection.

## 2. ASIRACA ANGULICORNIS.

*Asiraca angulicornis*, *Latr. Gen. Crust. et Ins.* iii. 167, 2.

Africa.

## 3. ASIRACA HAGAMIA.

*Hagamia*, *Amyot, Ann. Soc. Ent. Fr. 2me Série*, v. 172, 401.

Europe.

## 4. ASIRACA? PTERIDETHA.

*Pteridetha*, Var. 1. *nigra*. 2. *pallida*. 3. *griseus*, *Amyot, Ann. Soc. Ent. Fr. 2me Série*, v. 173, 402.

Europe.

## Tribe 2. ISSITES.

Issites, *Spin. Ann. Soc. Ent. Fr.* viii. 204.

Fulgorides, *Amyot et Serville* (ad partem).

Flatides, *Amyot et Serville* (ad partem).

## Sub-Tribe 1. ISSOIDES.

Issoides, *Spin. Ann. Soc. Ent. Fr.* viii. 204, 341.

Issides, *Amyot et Serville*.

Issidae, *Schaum* (ad partem).

## Genus 1. MYCTERODES.

Mycterodes, *Spin. Ann. Soc. Ent. Fr.* viii. 341.

## 1. MYCTERODES NASUTUS.

Mycterodes nasutus, *Spin. Ann. Soc. Ent. Fr.* viii. 342. *Amyot et Serr. Hist. Nat. Hém.* 517, 1.

Issus nasutus, *Herr.-Schäff. Nom. Ent.* 65. *Faun. Germ.* 144, 15.

Mycterodes, *Amyot, Ann. Soc. Ent. Fr. 2me Série*, v. 174, 403.

South Europe.

## Genus 2. ISSUS.

Issus, *Fabr. Syst. Rhyn.* 99.

Fulgora, *Olivier*.

Cicada, *Geoffrey, Villers*.

Cercopis, *Fabr. Panzer, Petagna*.

Group 1. *Burm. Handb. Ent.* ii. 1, 148.

Amphiscepa? *Germar, Schaum* (ad partem).

Fore-wings rather flat, broadest near the base, convex on the fore border, smaller and rounded at the tip.

## 1. ISSUS COLOMBÆ, MAS.

*Fulvus*; *caput nigro varium, antice carinatum et tuberculatum*; *mesothorax bicarinatus*; *abdomen piccum, basi rufum*; *pedes fulvi*; *femora antica subtus serrata*; *alæ anticae fulvae, posticae fuscae*.

Body tawny, head narrower than the chest, a little broader than long, spotted with black, concave on the hind border, slightly convex

in front ; front mostly black, excavated and angular next the crown, slightly increasing in breadth to the epistoma where it is round ; its ferruginous middle ridge has on each side a tawny curved stripe, these latter are studded with tawny tubercles, united at each end, and inclose an oval compartment : epistoma lanceolate, mostly black : fore-chest almost conical in front, straight behind ; its length about one-fourth of its breadth : middle-chest much longer than the fore-chest with an oblique ridge on each side : hind-chest reddish : abdomen pitchy, longer and broader than the chest, reddish towards the base, tawny at the tip : legs tawny ; fore-thighs serrated beneath : fore-wings tawny, brighter here and there ; veins tawny, slightly tinged with green : hind-wings brown ; veins black. Length of the body 3 lines ; of the wings 6 lines.

a. Colombia. From Mr. Turner's collection.

## 2. ISSUS PECTINIPENNIS.

*Issus pectinipennis*, *Guér. Voy. Belanger, Zool.* 475. *Icon. Régn. Anim.* pl. 58, f. 10. *Spin. Ann. Soc. Ent. Fr.* viii. 347, 1.

Bengal.

## 3. ISSUS LONGIPENNIS.

*Issus longipennis*, *Spin. Ann. Soc. Ent. Fr.* viii. 348, 2.

## 4. ISSUS PRASINUS.

*Issus prasinus*, *Spin. Ann. Soc. Ent. Fr.* viii. 349, 3.

Brazil.

## 5. ISSUS TENDINOSUS.

*Issus tendinosus*, *Frivaldsky, MSS. Spin. Ann. Soc. Ent. Fr.* viii. 349, 4.

Roumelia.

## 6. ISSUS SERVILLEI.

*Issus Servillei*, *Spin. Ann. Soc. Ent. Fr.* viii. 351, 5.

North America.

## 7. ISSUS COLEOPTRATUS.

*Issus coleoptratus*, *Fabr. Syst. Rhyn.* 99, 1. *Ent. Syst.* iv. 53, 26. *Germ. Thom, Arch.* ii. 2, 50, 3, 1. *Mag. Ent.* iii. 204, 1. *Curt. Brit. Ent.* x. 449. *Herr.-Schäff. Nomencl. Ent.* i. 65. *Spin. Ann. Soc. Ent. Fr.* viii. 352, 6. *Burm. Handb. Ent.* ii. 1, 148, 1. *Crochard, Ed. Régn. Anim. Ins.* pl. 97, f. 6.

*Cicada dilatata*, *Don. Brit. Ins.* iv. 81, pl. 138, f. 5, 6.

*Fulgora gibbosa*, *Oliv. Enc. Méth.* vi, 576, 52.

*Cercopis coleoprata*, *Fabr. Ent. Syst.* iv. 53, 26. *Panz. Faun. Germ.* 2, 11.

*Cicada coleoprata*, *Geoff. Ins.* i. 418, 7. *Petagna, Ins. Ent.* ii. 622.

*Issus gibbosus*, *Latr. Hist. Nat. Ins.* xii. 313. *Costa, Faun. Rég.* *Nap. Ins. Em. Iss.* 1, 1.

*Var. Issus Lauri*, *Germ. Reise, Dalm. Mag. Ent.* iii. 204, 2. *Ahrens, Faun. Ins.* 2, 19.

*Issus, Amyot, Ann. Soc. Ent. Fr. 2me Série*, v. 175, 404.

*a—k.* England.

*l.* Geneva. Presented by M. Gory.

#### 8. ISSUS DILATATUS?

*Issus dilatatus*, *Latr. Hist. Ins.* xii. 314, 2. *Herr.-Schäff. Nom. Ent.* 1, 109. *Burm. Spin. Ann. Soc. Ent. Fr.* viii. 353, 7. *Costa, Ann. Zool.* 1831, 84, 24. *Faun. Regn. Nap. Ins. Em. Iss.* 33.

*Cicada dilatata*, *Vill. Ent.* i. 469, pl. 3, f. 13.

*Fulgora dilatata*, *Oliv. Enc. Méth.* vi. 577, 50.

*a—c.* South France.

*d, e.* Italy.

#### 9. ISSUS LILIIMACULA.

*Issus liliimacula*, *Costa, Faun. Rég. Nap. Ins. Em. Iss.* 2, 2, pl. 2, f. 1.

#### 10. ISSUS BIFASCIATUS.

*Issus bifasciatus*, *Costa, Faun. Rég. Nap. Ins. Em. Iss.* 3, 4, pl. 2, f. 2.

#### 11. ISSUS FLAVESCENS.

*Issus flavescens*, *Costa, Faun. Sici. Iss.* 3, 3.

#### 12. ISSUS MAURUS, Mas.

*Fuscus, fulvo et viridi varius; pedes viridi-fulvi, fusco fasciati; alae anticae fuscae, posticae subnigrae.*

Body dark brown: head narrower than the chest and than the fore-wing: crown forming a prominent angle in front, equally

notched behind, slightly depressed, a little broader than long; front increasing in breadth till near the epistoma where it again contracts, much longer than broad; a row of tawny spots along each side; disk greenish-yellow towards the epistoma; a tawny middle ridge traversed near the crown by a yellow ridge; epistoma triangular, as long as the front, with three yellow spots at the base and one on the disk near the tip: fore-chest nearly as long as the crown, adorned with yellow dots and a yellow middle ridge, straight behind, convex in the middle of the fore border, it is slightly concave for the reception of the eyes: middle-chest triangular, longer than the fore-chest, tinged with green on each side: abdomen longer than the chest, mostly tawny and slightly tinged with green beneath: legs tawny, tinged with green, adorned with irregular brown bands; hind-shanks armed with two teeth whose tips are black: fore-wings pale brown, like those of *I. coleoptratus* in shape; veins brown: hind-wings blackish. Length of the body 3 lines; of the wings 6 lines.

a. South of France?

### 13. ISSUS BIMACULA, Mas.

*Fulvus, fusco variis; abdomen subtus viride, nigro plagiatum; pedes fulvi, viridi et ferrugineo varii; alæ anticae viridi, fulvae-fusco bimaculatæ; alæ posticae subfulvae.*

Body tawny: head narrower than the chest and than the forewing near the base; crown prominent and angular in front, nearly equally notched on the hind border; front very slightly widening till near the epistoma where it is slightly contracted, brown with a row of tawny spots along each side; the tawny middle ridge is intersected by a cross-ridge, between which and the crown the space is dark brown with tawny spots; epistoma triangular, as long as the front; disk ferruginous with tawny oblique streaks on each side: fore-chest a little shorter than the crown, very convex in the middle of the fore border, straight behind, brown with tawny spots on each side: middle-chest triangular, partly brown, hardly longer than the fore-chest: abdomen obconical, longer than the chest, grass-green beneath with a large black spot in the disk; tip tawny, partly ferruginous: legs tawny, tinged with green and ferruginous; tips of the shanks and of the feet brown: fore-wings a little narrower towards the tips than those of *I. coleoptratus*, pale tawny tinged with green; longitudinal veins green; cross-veins brown; a brown spot on the disk near two-thirds of the length from the base: hind-wings pale tawny; veins darker. Length of the body  $2\frac{1}{4}$  lines; of the wings 5 lines.

a. ———? Presented by J. G. Children, Esq.

14. *ISSUS CONCOLOR*, Mas.

*Fuscus, fulvo maculatus; thorax fulvo carinatus; abdomen subtus fulvum; pedes fulvi; alæ anticæ testaceæ; alæ posticæ nigrae.*

Body brown: head as broad as the chest, a little narrower than the fore-wing near the base, slightly angular on the fore border, equally concave behind, partly tawny on each side, with a slight longitudinal middle suture; border tawny, ridged; its breadth full twice its length; front large, adorned with tawny dots, widening much towards the epistoma, near which it is contracted and has a concave fore border; a row of impressions along each side; middle longitudinal ridge and that round the border slight; a more distinct convex cross-ridge near the crown; its length exceeding its breadth; epistoma lanceolate, about half the breadth of the front: fore-chest adorned with tawny spots, a little longer than the crown, very convex in the middle of the fore border, hardly concave on each side, straight along the hind border; longitudinal middle ridge and the borders tawny: middle-chest triangular, a little longer than the fore-chest, with three? tawny ridges: abdomen slightly obconical, shorter than the chest, tawny beneath, with a long slender hairy incurved appendage at the tip: legs tawny; hind-shanks armed with two teeth whose tips are black: fore-wings testaceous, convex but hardly dilated on the fore border; veins ferruginous; cross-veins pale yellow: hind-wings blackish, veins black. Length of the body  $1\frac{3}{4}$  line; of the wings 5 lines.

a. ——— ?

15. *ISSUS CONSPERSUS*, Mas.

*Fulvus, nigro-guttatus, flavo striatus; abdomen viride, nigro fasciatum; pedes fulvo-virides, nigro et fusco varii; alæ fuscaë, anticæ nigro punctatæ.*

Body tawny: head about one-third of the breadth of the fore-wings near the base, mostly yellow on each side and behind: crown much broader than long, somewhat angular in front, slightly concave on the hind border, crested and black on each side; front rather long, notched next the crown, yellow with black spots along each side; having a middle ridge which is continued along the epistoma; the latter is triangular, as long as the front, and has a row of oblique black streaks along each side: mouth tawny: fore-chest a little longer than the crown, straight along the hind border, very convex in front, partly yellow on each side and with a yellow middle stripe, adorned with numerous black dots, its length about one-fourth of its



breadth; middle-chest triangular, longer than the fore-chest, with three parallel yellow ridges, adorned with black dots on each side: abdomen green, obconical, dotted with black, tawny at the tip, as long as the chest; hind borders of the segments black above: legs green, grooved, partly tawny, marked with black or brown; hind-shanks armed with two teeth: fore-wings brown, convex on the fore border towards the base, covered with black punctures, their breadth near the tips more than half of that near the base; veins ferruginous; cross-veins few, confined to the fore borders and the tips: hind-wings dark brown, paler towards the base: veins black. Length of the body 3 lines; of the wings  $7\frac{1}{2}$  lines.

a. Warm Springs, N. Carolina. Presented by E. Doubleday, Esq.

#### 16. ISSUS QUADRIGUTTATUS, Mas.

*Fulvus, flavo quadrimaculatus; pectus flavum, nigro varium; abdomen subtus flavum, piceo tririttatum; pedes fulvi; tarsi postici flavi; alae fulvae, antice fusco biguttatae.*

Body tawny: head less than half the breadth of the fore-wings near the base; crown quadrangular, angular and edged with black in front, more concave on the hind border, its breadth less than twice its length; front ferruginous, flat, nearly quadrate, slightly widening towards the epistoma, and having a convex cross-ridge which approaches near the crown, the compartment between them being brown, divided by a tawny ridge and having some tawny spots on each side, a row of punctures along each side and with a slight tawny middle ridge, its length slightly exceeding its breadth: epistoma ferruginous, narrow, triangular, as long as the front, yellow at the tip and at the base where there are two black spots; a bright yellow spot on each side of the head: mouth tawny reaching the hind-hips: fore-chest very convex in front, straight behind, slightly marked with ferruginous colour, adorned on each side with a yellow spot: middle-chest triangular, hardly longer than the fore-chest: breast yellow, marked with black on each side: abdomen obconical, not longer than the chest, yellow beneath with three pitchy stripes: legs tawny, slightly tinged with darker colour; hind-shanks armed with two spines, yellow towards the tips: hind-feet yellow: fore-wings dull tawny, very convex on the fore border near the base, adorned with two brown dots, one in the middle of the disk, the other in a line with it near the hind border, their breadth near the tips about half of that near the base: veins tawny: hind-wings darker: veins black. Length of the body  $2\frac{1}{2}$  lines; of the wings 6 lines.

a. Hong-Kong. Presented by J. C. Bowering, Esq.

## 17. ISSUS BIPLAGA, Mas.

*Fulvus; thorax fusco bimaculatus; abdomen subtus nigro vittatum; pedes fulvi, femora supra ferruginea; tibiæ viridi-fulvæ; alæ anticae fuscae, flavo bimaculatæ; alæ posticæ nigro-fuscae.*

Body tawny: head rather less than half the breadth of the fore-wings near the base; crown partly ferruginous, surrounded by a rim, angular behind, very convex on the fore border, where there is a narrow arched compartment with a black disk; front brown, very large, subquadrate, with a yellow spot on its middle ridge near the crown, slightly widening towards the epistoma where it is rounded, its length slightly exceeding its breadth; epistoma much shorter than the front: mouth tawny: fore-chest semi-elliptical, a little shorter than the crown, straight along the hind border, brown towards the front where it is rounded, its breadth nearly thrice its length: middle-chest triangular, a little longer than the fore-chest, with a slight middle ridge, and having a brown spot on each side by the fore border: abdomen obconical, not longer than the chest; a black stripe beneath: legs tawny: thighs ferruginous above; shanks tinged with green: fore-shanks armed with two spines: wings brown, very convex on the fore border at one-third of the length, tawny towards the tips, adorned with a very large subquadrate whitish-yellow spot which occupies full half the breadth from the fore border, their breadth near the tips full half of that near the base; veins tawny, tinged with green: hind-wings dark brown; veins black. Length of the body  $2\frac{1}{2}$  lines; of the wings 6 lines.

a. Hong-Kong. Presented by J. C. Bowring, Esq.

## 18. ISSUS SINENSIS, Mas.

*Fuscus; caput supra fulvo cinctum; subtus flavo maculatum; thorax fulvo et flavo varius; abdomen fulvum, fusco subvittatum; pedes fuscæ; alæ anticae nigro fuscae, inter venas flavo seriatis fasciata; alæ posticæ nigrae.*

Body dark brown: head about half the breadth of the fore-wings near the base; crown slightly depressed, somewhat convex in front, more angular behind, almost surrounded by a tawny border: a tawny spot near the hind border on each side of the tawny middle stripe; front subquadrate, slightly wider and rounded towards the epistoma, with a pale yellow spot on each side near the crown, and a slight middle ridge; epistoma triangular, with a large yellow spot on each side at the base: mouth pale brown: fore-chest very con-

vex in front, almost straight behind, adorned with a pale yellow middle stripe which is broader in front, and with a more obscure spot on each side; its breadth rather more than twice its length: middle-chest triangular, somewhat tawny along the borders, and having a pale dull yellow spot on the middle ridge near the fore border; its length a little more than half its breadth: abdomen dull tawny, obconical, slightly striped with brown, a little shorter than the chest: legs pale brown, rather broad, slightly grooved; hind-shanks armed with two teeth: fore-wings dark brown, convex along the fore border, adorned between the longitudinal veins with rows of short pale dull yellow bands; their breadth near the base less than twice that near the tips; veins black: hind-wings blackish. Length of the body 3 lines; of the wings 7 lines.

a. Hong-Kong. Presented by J. C. Bowring, Esq.

#### 19. ISSUS APICALIS, Mas.

*Fulvus, ad partem obscurior; pectus roseum; pedes fulvi, lati; alæ anticae cervinae, subnotatae, apice nigro maculatae; alæ posticae nigro-fuscae, basi sublimpidæ, apice albo fasciatae.*

Body tawny: head broad, about half the breadth of the fore-wings near the base; fore border of the crown ferruginous; face hexagonal, much broader than long, with an acute angle on each side; epistoma small, triangular: mouth tawny: fore-chest irregularly dotted with darker colour, slightly convex in front, straight on the hind border; its breadth about four times its length: middle-chest triangular, its breadth full twice its length: breast bright rose-colour: abdomen obconical, a little shorter than the chest: legs broad, tawny, streaked with darker colour, slightly grooved; hind-shanks armed beneath with five black spines: fore-wings very convex near the base, fawn-colour, with indistinct darker marks, their breadth near the base full twice that near the tips which are adorned with a few black spots of various size; veins tawny: hind-wings dark brown, nearly colourless towards the base, adorned with a white band near the tips. Length of the body  $2\frac{1}{2}$  lines; of the wings 7 lines.

a. North India. From Mr. Warwick's collection.

#### 20. ISSUS TESTACEUS, Mas.

*Testaceus, fusco varius; abdominis discus subtus niger; pedes fulvi; alæ testaceae.*

Body testaceous: head a little less than half the breadth of the fore-wings near the base; crown slightly concave, surrounded by

a rim, excavated behind, hardly convex in front, its length rather less than half its breadth; front luteous, large, flat, subquadrate, a little longer than broad, very slightly widening and rounded on each side towards the epistoma, ferruginous and tuberculate along each side, with three ridges, the side pair converging towards the epistoma; the latter is triangular, ferruginous towards the tip, much shorter than the front; mouth tawny: fore-chest a little longer than the crown, straight along the hind border, very convex in front, with two brown dots on the disk, its length about one-fourth of its breadth: middle-chest triangular, marked with darker colour, a little longer than the fore-chest: abdomen obconical, as long as the chest, disk beneath black: legs tawny, slightly grooved; hind-shanks armed with two teeth: fore-wings testaceous, convex along the fore border, slightly rugulose, their breadth near the tips much more than half of that near the base; veins testaceous: hind-wings paler. Length of the body 2 lines; of the wings 5 lines.

a. Columbia. From Mr. Turner's collection.

#### 21. *ISSUS ACUTUS*, MRS.

*Fuscus, subtus ferrugineus; caput acuminatum; pedes fusco-ferruginei; alæ anticae angustae, posticae subeineræ.*

Body brown, ferruginous beneath: head small, but more than one-fourth of the breadth of the fore-wings: crown narrow, conical, almost pointed, its length rather more than twice its breadth; a triangular compartment on each side between it and the front which is long-conical, transversely striated, and has three ridges, the middle one more distinct than the other two which are parallel to the sides; epistoma short obconical, hardly half the length of the front: mouth ferruginous, reaching the hind-hips: eyes large: fore-chest full half the length of the head, nearly semicircular in the middle, concave on each side for the reception of the eye, with a slight ridge on the border, and a longitudinal middle ridge: middle-chest triangular, longer than the fore-chest, with three ridges, the side pair short and slightly oblique: abdomen obconical, a little longer than the chest: legs ferruginous, partly brown, slightly grooved; hind-shanks armed with three teeth; hind-feet rather broad: fore-wings almost elliptical, narrower than is usual in this genus, slightly convex but not widened on the fore border, with eight longitudinal ridged veins, the first and second distinct, the third united near the base to the fourth which is united near the tip to the fifth, the latter is united beyond half its length from the tip to the sixth; cross-veins indistinct: hind-wings grayish. Length of the body  $2\frac{1}{2}$  lines; of the wings 5 lines.

a. Philippine Islands. From Mr. Cuming's collection.

Group 2, *Burm. Handb. Ent.* ii. 1, 148.Amphiscepha? *Germar.*

Fore-wings concave, almost triangular, widening gradually towards the tips.

22. *ISSUS CRISTATUS.**Issus cristatus*, *Fabr. Syst. Rhyn.* 100, 2.

Isle of France.

23. *ISSUS CARINATUS.**Issus carinatus*, *Fabr. Syst. Rhyn.* 100, 3.

a. Isle of France.

24. *ISSUS MUSCARIUS.**Issus muscarius*, *Germ. Thon, Arch.* ii. 2, 52, 22. *Burm. Handb. Ent.* ii. 1, 148, 2.

Bahia.

25. *ISSUS NODIPENNIS.**Issus nodipennis*, *Germ. Mag. Ent.* iv. 102, 5.*Amphiscepa nodipennis*, *Germ. Schaum, Allg. Enc. Wissensch. Kunst.* 1. Sect. 51, 71, 50.

Brazil.

26. *ISSUS COMPRESSUS.**Issus compressus*, *Spin. Ann. Soc. Ent. Fr.* viii. 354, 8.

Brazil.

27. *ISSUS RUBROCASTATUS.**Issus rubrocastatus*, *Spin. Ann. Soc. Ent. Fr.* viii. 357, 9.

Brazil.

28. *ISSUS HERBACEUS.**Issus herbaceus*, *Spin. Ann. Soc. Ent. Fr.* viii. 357, 10.

Cayenne.

29. *ISSUS RETUSUS*, Fem.

*Cervinus*; abdomen apice productum compressum et retusum; pedes cervini; alæ anticæ stramineæ, retusæ, apice ferrugineæ; alæ posticæ albide.

Body pale fawn-colour: head rather small, hardly one-fourth of the breadth of the fore-wings near the base; crown short, quadrangular, hardly concave behind, very slightly convex in front, its breadth a little more than twice its length; front nearly flat, surrounded by a rim, with a middle ridge, slightly rounded on each side, its length much exceeding its breadth; epistoma small, much shorter than the front: mouth pale fawn-colour, reaching the hind-hips: fore-chest about twice the length of the crown, very slightly concave on the hind border, conical in front, its length about half its breadth: middle-chest triangular, paler and a little longer than the fore-chest: abdomen much longer than the chest, tapering, compressed and retuse towards the tip, darker beneath towards the base: legs pale fawn-colour; hind-shanks unarmèd: fore-wings pale straw-colour, very convex on the fore border, tapering and inclined upward towards their tips which are ferruginous, crested on each side of the inner base; some white tubercles on the disks of the areolets; veins pale straw-colour: hind-wings whitish. Length of the body  $1\frac{3}{4}$  line; of the wings 4 lines.

a. Madeira. Presented by Capt. Parry.

30. *ISSUS ADSCENDENS*.

*Issus adscendens*, *Herr.-Schüff. Nomencl. Ent.* i. 65.

Europe.

31. *ISSUS NASUTUS*.

*Issus nasutus*, *Herr.-Schüff. Nomencl. Ent.* i. 65.

Europe.

32. *ISSUS RETICULATUS*.

*Issus reticulatus*, *Herr.-Schüff. Nomencl. Ent.* i. 65.

Europe.

## 33. ISSUS VARIUS.

*Fulvus; thorax nigro bivittatus; pedes fulvi; alæ anticae fulvæ, nigro maculatæ.*

Body tawny: head less than half the breadth of the fore-wings near the base; crown concave on the hind border, almost conical in front, black along each side, its length about half its breadth; crown with a middle ridge, mottled with black, slightly rounded on each side, narrower towards the epistoma whose sides it partly embraces; epistoma small: mouth tawny, nearly reaching the hind-lips: fore-chest as long as the crown, slightly tuberculate, straight along the hind border, very convex on the fore border, its length full one-fourth of its breadth: middle-chest triangular, much longer than the middle-chest, tuberculate near the fore border, with a black streak on each side: abdomen not longer than the chest: legs tawny; hind-shanks unarmed: fore-wings pale tawny, very broad, spotted with black in the disk, dotted with brown along the fore border and at the tips; their breadth at the tips very little less than that near the base. Length of the body  $1\frac{1}{2}$  line; of the wings 4 lines.

*a.* St. James' Isle, Galapagos. Presented by C. Darwin, Esq.

## 34. ISSUS? PRÆSTUS.

*Cercopis præusta, Fabr. Ent. Syst. iv. 53, 28.*

*Issus præusta, Fabr. Syst. Rhyn. 100, 5.*

Sweden.

## 35. ISSUS? PEDESTRIS.

*Cercopis pedestris, Fabr. Ent. Syst. iv. 54, 32. Pupa.*

*Issus pedestris, Fabr. Syst. Rhyn. 101, 9. Pupa.*

Piedmont.

## 36. ISSUS? BICORNIS.

*Issus bicornis, Fabr. Syst. Rhyn. 101, 10.*

South America.

## 37. ISSUS? UNDATUS.

*Issus undatus, Fabr. Syst. Rhyn. 101, 11.*

West Indies.

38. *ISSUS SANGUINIPES*.

*Issus sanguinipes*, *Germar*.

39. *ISSUS BIFORIS*.

*Issus biforis*, *Germar*.

40. *ISSUS ALBIGER*.

*Issus albiger*, *Germar*.

41. *ISSUS SIMPLEX*.

*Issus simplex*, *Germar*.

42. *ISSUS ELLIPTICUS*.

*Issus ellipticus*, *Germar*.

43. *ISSUS MUSCARIUS*.

*Issus muscarius*, *Germar*.

Genus 3. *HYSTEROPTERUM*.

*Hysteropterum*, *Amyot et Serv. Hist. Nat. Hém.* 519, 407.

*Issus*, *Fabr. Germar, Burmeister, Spinola, Herr-Schäff. Schaum.*

*Cercopis*, *Fabr.*

*Fulgora*, *Olivier.*

1. *HYSTEROPTERUM IMMACULATUM*.

*Hysteropterum immaculatum*, *Amyot et Serv. Hist. Nat. Hém.* 519, 1.

*Cercopis immaculatus*, *Fabr. Syst. Ent.* iv. 54, 59.

*Issus immaculatus*, *Fabr. Syst. Rhyn.* 100, 6. *Germ. Thon, Arch*  
ii. 2, 51, 12. *Burm. Handb. Ent.* ii. 1, 149, 3.



## 2. HYSTEROPTERUM GRYLLOIDES.

*Issus grylloides*, *Fabr. Syst. Rhyn.* 101, 8. *Spin. Ann. Soc. Ent. Fr.* viii. 358, 11, pl. 17, f. 2.

*Cercopis grylloides*, *Fabr. Ent. Syst.* iv. 54, 31.

*Issus apterus*? *Herr.-Schäff.*

Var. *Issus immaculatus*, *Fabr. Syst. Rhyn.* 100.

Var. *Fulgora flavescens*, *Oliv. Enc. Méth. Ins.* vi. 557, 52.

*Gryllomorphus*, *Amyot, Ann. Soc. Ent. Fr. 2me Série*, v. 177, 407.

Italy.

## 3. HYSTEROPTERUM DUFOURII.

*Issus Dufourii*, *Spin. Ann. Soc. Ent. Fr.* viii. 361, 12.

Var. *Grylloides*?

South of France.

## 4. HYSTEROPTERUM APTERUM.

*Cercopis aptera*, *Fabr. Ent. Syst.* iv. 54, 30.

*Issus apterus*, *Fabr. Syst. Rhyn.* 101, 7. *Germ. Spin. Ann. Soc. Ent. Fr.* viii. 362, 13.

*Hysteropterum*, *Amyot, Ann. Soc. Ent. Fr. 2me Série*, v. 176, 405.

Barbary.

## 5. HYSTEROPTERUM ? CORIACEUM.

*Issus coriaceus*, *Fabr. Syst. Rhyn.* 100, 4.

South America.

## 6. HYSTEROPTERUM DISCOLOR.

*Issus discolor*, *Germ. Mag. Ent.* iv. 102, 4.

South Russia.

## 7. HYSTEROPTERUM SMYRNENSE.

*Issus smyrnensis*, *Spin. Ann. Soc. Ent. Fr.* viii. 363, 14.

Smyrna.

## 8. HYSTEROPTERUM CONSPURCATUM.

*Issus conspurcatus*, *Friwaldsky MSS. Spin. Ann. Soc. Ent. Fr.* viii. 363, 15.

Roumelia.

## 9. HYSTEROPTERUM DIFFORME.

*Issus difformis*, *Spin. Ann. Soc. Ent. Fr.* viii. 364, 16.

*Cyphopterum*, *Amgot, Ann. Soc. Ent. Fr. 2me Série*, v. 176, 406.

Tuscany.

## 10. HYSTEROPTERUM DORSALE, Mas.

*Flavum. breve, latum; thorax fulvus, flavo bistrigatus; abdomen fuscum, flavo fasciatum, subtus fulvum; pedes fulvi; alæ antice fulvæ, flavo et fusco fasciatæ, apice latè truncatæ.*

Body yellow, short and broad: a brown longitudinal middle stripe on the head and chest and a row of brown dots on each side: head full half the breadth of the fore-wing near the base: crown short and broad, slightly convex in front, equally concave behind, its breadth about four times its length: fore part of the front scutcheon-shaped, with a row of brown spots along each side, its length much exceeding its breadth; epistoma tapering, much shorter and narrower than the front, mottled with brown on each side: mouth yellow: fore-chest very convex in front, equally concave behind, much longer than the head: middle-chest tawny, much longer than the fore-chest, very convex in front, straight along the hind border, with two yellow stripes on each side: abdomen obconical, a little shorter than the chest, brown above, tawny beneath: hind borders of the segments yellow: legs tawny, grooved: fore-wings dull tawny, nearly triangular, very convex on the fore border, truncate at the tips which are very broad; a short irregular and interrupted yellow band in the disk; nearer the tip a brown band proceeds from the fore border to the disk, and there bends to the tip; veins tawny: hind-wings wanting? Length of the body  $11\frac{1}{2}$  lines; of the wings 4 lines.

a. New Holland. Presented by the Haslar Hospital.

## 11. HYSTEROPTERUM IRRORATUM, Mas.

*Fulvum, breve, latum; thorax flavo guttatus; abdomen fusco guttatum; pedes fulvi; alæ antice subnigrae, maculis limpidis ornatae.*

Body tawny, short and broad: head very short, much broader than the fore-wing near the base; crown extremely short, nearly straight in front, concave on the hind border, its breadth full eight times its length: front large, scutcheon-shaped, speckled with yellow, having a slight rim along its border and a slight longitudinal middle ridge: its length much exceeding its breadth, deeply notched where it joins the epistoma, the latter is small and rhomboidal: mouth mostly brown: eyes prominent: chest speckled with yellow, slightly concave behind, more convex in front, its length not one-fourth of its breadth: middle-chest nearly triangular, much longer than the fore-chest, with a slight ridge on each side: abdomen obconical, speckled with brown, a little longer than the chest: legs tawny, slightly grooved; hind-shanks armed with four spines: fore-wings blackish, nearly straight on the fore border, very convex on the hind border, adorned with many colourless spots along the fore borders and at the tips; veins tawny: hind-wings wanting. Length of the body 2 lines; of the wings 4 lines.

a. Port Natal. From M. Guenzius' collection.

## 12. HYSTEROPTERUM PUNCTIFERUM, Mas.?

*Fulvum, breve, latum; thorax fusco quadrivittatus; abdomen fuscum, fulvo fasciatum; pedes fulvi, fusco varii; alæ anticae fulvae, fusco guttatae.*

Body tawny, short, broad, dotted with brown: head short and broad, much more than half the breadth of the fore-wing near the base; crown slightly depressed, nearly straight in front and behind; its breadth about thrice its length; front large, with three ridges, the side pair curved and inclosing a nearly elliptical area; its length slightly exceeding its breadth; epistoma nearly heart-shaped, with a slight middle ridge, and with a yellow spot on each side: mouth tawny, partly yellow: fore-chest as long as the crown, nearly straight behind, convex on the fore border: middle-chest triangular, longer than the fore-chest, adorned with four brown stripes which widen towards the hind border: abdomen obconical, brown, not longer than the chest; hind borders of the segments tawny: legs tawny, marked with brown, slightly grooved; hind-shanks armed with two spines:

fore-wings tawny, broad, convex above, and on the fore border near the base, and on the hind border near the tips, adorned with numerous brown dots, about a dozen on each areolet; veins tawny: hind-wings wanting? Length of the body  $1\frac{1}{2}$  line; of the wings 4 lines.

a. St. John's Bluff, E. Florida. Presented by E. Doubleday, Esq.

### 13. HYSTEROPTERUM TRUNCATELLUM, Mas.

*Fuleum*; *thorax nigro maculatus*; *abdomen fuscum, flavo fasciatum*; *pedes fulvi*; *alæ anticæ fulvæ, subcoriaceæ, latæ, apice truncate*.

Body tawny, short, broad, and very deep: head very short and broad, more than half the breadth of the fore-wing; crown extremely short, adorned with contiguous black spots, its breadth more than eight times its length; front large, flat, subquadrate, tinged with black on the fore border, the hind border and the middle longitudinal ridge, its breadth less than twice its length; epistoma small, nearly heart-shaped, adorned on each side with oblique ferruginous bands: mouth tawny: eyes not prominent: fore-chest very short, nearly straight, adorned with black spots, its breadth more than eight times its length: middle-chest triangular, full twice the length of the fore-chest, adorned with two black spots: abdomen obconical, brown, not longer than the chest: hind borders of the segments yellow: legs tawny, rather stout; hind-shanks armed with one spine: fore-wings tawny, coriaceous, nearly vertical, very broad, yellowish and slightly convex on the fore border, very convex and almost angular on the hind border, somewhat obliquely truncated at the tips; veins tawny; cross-veins very numerous, forming intricate ramifications: hind-wings wanting. Length of the body  $1\frac{1}{2}$  line; of the wings  $2\frac{1}{2}$  lines.

a. New Holland. Presented by the Haslar Hospital.

### Genus 4. HEMISPHERIUS.

*Hemisphærius*, *Schaum, Allg. Enc. Wissensch. Kunst. i. Sect. 51, 71, 52.*

*Issus, Burmeister.*

*Alæ anticæ convexæ, glabræ, elytrorum Coccinellæ similitudine.*

Fore-wings globose, smooth, quite coriaceous, like those of a beetle, such as *Coccinella* or *Chilocorus*.

## 1. HEMISPHERIUS COCCINELLOIDES.

*Issus Coccinelloides*, *Burm. Meyen, Reise, N. Act. Ph. Med. Soc. C. Leop. n. c.* xvi. 305, 38, pl. 41, f. 11.

*Hemisphærius Coccinelloides*, *Schaum, Allg. Enc. Wissench. Kunst.* i. 51, 71.

a. Philippine Islands. From Mr. Wood's collection.

b. Philippine Islands. From Mr. Cuming's collection.

## 2. HEMISPHERIUS FLAVIMACULA, MAS.

*Ferrugineus, flavo varius; abdomen flavo fasciatum; pedes flavi, ferrugineo varii; alæ anticæ ferruginæ, flavo quatuordecim maculatæ.*

Body ferruginous, convex, like a *Coccinella* in shape: head much more than half the breadth of the fore-wing near the base: crown yellow, nearly straight before and behind, ferruginous and rather narrower in front: its breadth slightly exceeding its length: front pitchy, long, diamond-shaped, adorned with two yellow bands, the first slightly curved, the second straight: epistoma very small, tawny: mouth yellow: eyes not prominent: fore-chest extremely short: middle-chest yellow, triangular, with a ferruginous border: abdomen nearly semicircular, a little shorter than the chest: hind borders of the segments yellow: legs yellow: thighs adorned with ferruginous bands: shanks pitchy above: feet ferruginous: hind-shanks armed with two black-tipped spines: fore-wings ferruginous, very convex, quite coriaceous, each adorned with seven yellow spots: the first at the base; the second and third in the middle; the fourth, fifth and sixth forming an interrupted band near the tip, the sixth sometimes united to the seventh, which is narrow and accompanies the fore border to the tip. Length of the body 2 lines; of the wings 5 lines.

a. Hong-Kong. Presented by J. C. Bowring, Esq.

## 3. HEMISPHERIUS CONTUSUS, MAS.

*Fulvus; prothorax flavo unimaculatus; mesothorax undecimstriatus; abdomen ferrugineum; pedes nigri, fulvo varii; alæ anticæ fusæ, apice fulvo maculatæ; alæ posticæ subfulvæ.*

Body tawny, in shape like that of a *Coccinella*: head about half the breadth of the fore-wing near the base, mottled with yellow

crown short, very slightly convex in front and equally concave behind, its breadth about thrice its length; front forming with the epistoma almost an oval, darker along each side where it is adorned with a row of little yellow tubercles; epistoma pitchy, triangular, slightly ridged, shorter and very much narrower than the front: fore-chest not longer than the crown, slightly tuberculate, almost transversely spindle-shaped, but more convex in front than behind, adorned on the fore border with a transversely elliptical yellow spot between which and the hind border it is darker than elsewhere: middle-chest triangular, finely striated across, slightly concave on the fore border whence eleven indistinct ridges radiate, darker towards the tip: hind-chest triangular, its ridges obsolete, not longer

elliptical, quite coriaceous, widened on the fore border at the base, near which they are slightly concave; some indistinct tawny marks near the tips: hind-wings slightly tinged with tawny, fully developed; veins tawny. Length of the body 2 lines; of the wings 5 lines.

*a.* China. Presented by G. T. Lay, Esq.

#### 4. *HEMISPHERIUS CHILOCORIDES*, Fem.

*Fulvus, flavo maculatus; mesothorac substriatus; pedes fulvi, nigro varii; alae fulvae.*

Body tawny, in shape like the preceding species: head mottled with yellow; front with a row of little yellow tubercles along each side; epistoma black, tawny next to the front: mouth tawny, reaching the hind-hips: a transversely elliptical yellow spot on the fore border of the fore-chest: middle-chest brown, its ridges more indistinct than those of *C. contusus*, some of them obsolete: legs tawny; anterior thighs black with tawny tips; a black band on each of the anterior shanks; hind-shanks armed with two spines whose tips are black: fore-wings tawny, in structure like those of *C. contusus*: hind-wings pale tawny; veins tawny. Length of the body  $1\frac{1}{2}$  line; of the wings 4 lines.

*a.* Hong-Kong. Presented by J. C. Bowring, Esq.

5. *HEMISPHERICUS SIGNIFER*, Mas.

*Stramineus; alæ anticae fusco unifasciatae, univittatae et biguttatae :  
alæ posticae limpidae.*

Body straw-colour, in shape like the two preceding species: crown almost conical, slightly mottled with darker colour, angular on the hind border, divided by a longitudinal suture into two compartments; front very slightly concave on each side, widening much from the crown to the epistoma where it is convex on each side; epistoma lanceolate, a little shorter and much narrower than the front: fore-chest as long as the crown, nearly triangular, almost straight along the hind border, with a somewhat rounded angle in front; its breadth about twice its length: middle chest triangular, a little longer than the fore-chest: abdomen oboconical, not longer than the chest; inside of the valves at the tip pale green: legs pale straw-colour, grooved; hind-shanks armed with two spines whose tips are black: fore-wings coriaceous, pale straw-colour, perhaps white in life, in shape like those of *C. contusus*, adorned with an oblique brown stripe near the base, with a brown band in the middle, and with two brown dots near the tip: hind-wings colourless; veins pale yellow. Length of the body 1 line; of the wings  $2\frac{1}{2}$  lines.

*a, b.* Hong-Kong. Presented by J. C. Bowring, Esq.

Genus 5. *OMMATIDIOTUS*.

*Ommatidiotus*, *Spin. Ann. Soc. Ent. Fr.* viii. 365.

1. *OMMATIDIOTUS DISSIMILIS*.

*Ommatidiotus dissimilis*, *Spin. Ann. Soc. Ent. Fr.* viii. 367.

*Issus dissimilis*, *Pall. Act. Holm.* 1806. *Germ. Faun. Ins. Eur. fasc.* 9, f. 15, 16.

Sweden.

Genus 6. *PHYLLOSCELIS*.

*Phylloscelis*, *Germ. Zeit.* i. 191.

1. *PHYLLOSCELIS PALLESCENS*.

*Phylloscelis pallescens*, *Germ. Zeit.* i. 192, 1.

Pennsylvania.

## 2. PHYLLOSCELIS ATRA.

*Phylloscelis atra*, *Germ. Zeit.* i. 192, 2.  
 Pennsylvania.

## Genus 7. EURYBRACHYS.

*Eurybrachys*, *Guérin, Belanger, Voy. Ind. Orient.* 475, 13.  
*Cicada*, *Fabr. Coquebert.*  
*Lystra*, *Fabr.*  
*Fulgora*, *Latr.*  
*Loxocephala*, *Schaum* (ad partem).

## 1. EURYBRACHYS TOMENTOSA.

*Eurybrachys tomentosa*, *Burm. Handb. Ent.* ii. 1, 150, 1. *Amyot et Serv. Hist. Nat. Hém.* 517, 1.  
*Cicada tomentosa*, *Fabr. Ent. Syst.* iv. 30, 17.  
*Lystra tomentosa*, *Fabr. Syst. Rhyn.* 60, 14.  
 a. Ceylon. Presented by Dr. J. Hooker.

## 2. EURYBRACHYS SPINOSA.

*Eurybrachys spinosa*, *Burm. Handb. Ent.* ii. 1, 150, 2. *Spin. Ann. Soc. Ent. Fr.* viii. 369, 1.  
*Cicada spinosa*, *Coqueb. Illustr.* ii. 45, pl. 7, f. 4.  
*Lystra spinosa*, *Fabr. Syst. Rhyn.* 58, 7.  
 a. East India. Presented by the Entomological Club.  
 b. East India. From Mr. Warwick's collection.  
 c, d. East India. From Mr. Sowerby's collection.  
 e—g. East India.

## 3. EURYBRACHYS LEPELLETIERI.

*Eurybrachys Lepelletieri*, *Guérin, Voy. Belanger*, 476.  
 Bengal.

## 4. EURYBRACHYS ABBREVIATA

*Eurybrachys abbreviata*, *Guérin, Vog. de la Coquille*, ii. 19, 3. *Spin. Ann. Soc. Ent. Fr.* viii. 369, 2.  
 New Holland.



## 5. EURYBRACHYS INSIGNIS.

*Eurybrachys insignis*, *Westw. Ann. Nat. Hist.* 1842, 119. *Hope Trans. Linn. Soc.* xix. 134, 27, pl. 12, f. 9.

*a, b.* Manilla. From Mr. Cuming's collection.

*c.* ———? From Mr. Birch's collection.

## 6. EURYBRACHYS MACULIPENNIS.

*Eurybrachys maculipennis*, *Guillon, Rev. Zool.* 1841.

North Australia.

## 7. EURYBRACHYS ÆRUGINOSA.

*Lystra æruginosa*, *Hope, Trans. Linn. Soc.* xviii. 443, pl. 31, f. 1.

*Loxocephala æruginosa*, *Schaun, Allg. Enc. Wissench. Kunst.* 1. Sect. 51, 71, 53.

*a.* North India. From Mr. James' collection.

## 8. EURYBRACHYS PULVEROSA.

*Eurybrachis pulverosa*, *Hope, Trans. Linn. Soc.* xix. 134, 25, pl. 12, f. 7.

Silhet.

## 9. EURYBRACHYS REVERSA.

*Eurybrachis reversa*, *Hope, Trans. Linn. Soc.* xii. 26, pl. 12, f. 8.

Silhet.

## 10. EURYBRACHYS DECORA, Mas.

*Viridis*; *mesothorax anticus nigro interruptè fasciatus*; *pedes rufi*; *femora antica nigro vittata*; *tarsi nigro varii*; *alæ anticæ virides, albo biguttatæ, basi et apice nigro fasciatæ*; *alæ posticæ albæ, apice nigro fasciatæ.*

Body green: head nearly as broad as the chest; crown surrounded by a rim which is black in front and behind, slightly convex on the fore border, very slightly concave on the hind border, its breadth about thrice its length; front large, scutcheon-shaped, much

broadier than long, surrounded by a slight rim; epistoma small; mouth tawny: fore-chest hardly longer than the crown, nearly straight behind, slightly convex on the fore border, along which there is a black band: its breadth more than thrice its length: middle-chest short, hardly longer than the fore-chest, nearly triangular, with a black interrupted band in front: abdomen obconical, much longer than the chest: legs red: fore legs rather broad and flat; fore-shanks striped with black; hind-shanks armed with five spines; feet partly black: fore-wings green with an oblique black band at the base, black along the tips, near which there is another oblique black band in the disk; two white dots in the middle, one near the fore border, the second near the hind border, and nearer the tip than is the first: veins green: hind-wings white, green towards the tips which are black; an oblique black spot on the fore border near the tip; veins pale yellow. Length of the body 5 lines; of the wings 14 lines.

a. Assam. From Mr. Warwick's collection.

#### II. EURYBRACHYS PUNCTIFERA, MRS.

*Cervina, nigro fuscoque guttata, pectus stramineum; abdomen apice nigro fasciatum; pedes straminei, nigro varii; femora pallide viridia; alae antecæ cervinæ nigro guttatae, apice limpidæ; alae posticæ limpidæ, apice nigro maculatae.*

Body fawn-colour, irregularly dotted with brown and black: head nearly as broad as the chest: crown very slightly arched, its breadth much more than twice its length: front straw-colour with small ferruginous marks, transversely angular towards the epistoma where it is concave: its breadth about twice its length; epistoma lanceolate, ferruginous, straw-colour at the base: mouth tawny, reaching a little beyond the middle-lips: fore-chest convex in front, straight behind, not longer than the crown, its breadth about four times its length: middle-chest longer than the fore-chest, with five indistinct ridges; scutcheon small, triangular, its hind side forming an acute angle: breast pale straw-colour; abdomen obconical, a little shorter than the chest, banded with black towards the tip; sexual appendages black: legs pale straw-colour, mottled with black which is most prevalent on the fore-legs; thighs tinged with very pale green, with a few brown dots; only the tips of the fore-thighs marked with black; hind-shanks armed with six spines whose tips are black: fore-wings fawn-colour, colourless towards the tips, adorned with black dots which are larger, more numerous and more distinct towards the tips; veins tawny: hind-wings almost colourless, each with a large black spot near the tip, and a smaller one on

the hind border at three-fourths of the length ; veins very pale green. Length of the body 5 lines ; of the wings 18 lines.

*a.* Madras. Presented by Mrs. Capt. Hamilton.

## 12. EURYBRACHYS TRICOLOR, Mas.

*Nigra ; caput subtus fuscum ; prothoracis latera ferruginea ; pectus, abdomen et pedes rufa ; tarsi nigri ; alæ antice nigrae, fusco guttatae ; alæ posticae albæ.*

Body black : head nearly as broad as the chest ; crown pitchy, arched, striated lengthwise, more convex in front than concave behind, its breadth nearly four times its length ; front brown, quite flat, very finely granulated, scutcheon-shaped, hexagonal, broader than long, slightly concave on the fore border, where it joins the epistoma which is lanceolate and reddish-tawny : mouth tawny with a black tip, nearly reaching the hind-hips : fore-chest slightly convex in front, straight behind, ferruginous on each side, very little longer than the crown : middle-chest longer than the fore-chest, very indistinctly furrowed, forming behind an acute angle, on each side of which it is slightly concave : breast red : abdomen bright rose-colour, obconical, a little longer than the chest, pale tawny towards the tip, which is black : legs red, broad ; feet black ; hind-shanks armed with four teeth whose tips are black : fore-wings black, with irregular and indistinct brown dots, some of which are confluent ; veins black : hind-wings white ; tips sometimes gray ; veins pale yellow. Length of the body  $3\frac{1}{2}$ —4 lines ; of the wings 11—13 lines.

*a—d.* North India. From Mr. Warwick's collection.

## 13. EURYBRACHYS SICCA, Fem.

*Ferruginea ; abdomen fulvum suturis piceum, pedes ferrugini ; alæ antice ferrugineæ, nigro varicæ, apice fulvæ maculisque nigris et limpidis ornatae ; alæ posticæ limpidæ apice fuscæ.*

Body ferruginous, dull, minutely rugulose, adorned with tawny spots : head as broad as the chest, its breadth more than twice its length ; crown short, slightly curved, surrounded by a ridge ; face broad, flat, surrounded by a slight ridge, transversely elliptical with the exception of a concavity on the fore part of each side, having in the disk a shallow slightly arched transverse ridge, concave in the middle of the suture where it joins the epistoma : mouth ferruginous, reaching the hind-hips : eyes hardly prominent : shield of the chest short, slightly arched : scutcheon having on each side two slight

curved ridges, which converge near the fore border: hind-chest short, with tawny transverse ridges: abdomen tawny, nearly elliptical, a little longer than the chest; tip thickly clothed with white filaments; sutures of the segments more or less pitchy: legs ferruginous, stout, furrowed; hind-shanks armed with broad spines: fore-wings ferruginous, adorned with black marks which are various in size and shape; reticulated part tawny, occupying more than one-third of the surface, adorned with some black and colourless marks, the latter chiefly on the borders; veins ferruginous: hind-wings tawny, brown towards the tips; veins brown. Length of the body  $5\frac{1}{2}$  lines; of the wings 16 lines.

a. New Holland. Presented by the Earl of Derby.

b, c. ———?

#### 14. EURYBRACHIUS SERA, Mas.

*Ferruginea nigro varia; metathorax fulvus; abdomen luteum; pedes rufi; alæ anticae flavo-limpidae, basi flavo-fuscae nigro varice macula una limpida, apice flavo-fuscae maculis duabus limpidae; alæ posticae limpidae apice margineque postico fuscae.*

Body ferruginous with blackish marks: head as broad as the chest; crown short, with numerous little longitudinal ridges, adorned on each side with an indistinct tawny spot, slightly convex along the fore border; face broad and flat, finely rugulose, spotted with yellow, surrounded by a shallow ridge, and traversed on the disk by a slight blackish ridge which has a notch in the middle: epistoma ferruginous, parted from the face by a concave suture: mouth tawny, reaching the hind-hips: eyes rather large and prominent: shield of the chest short, convex along the fore border, with a very indistinct ridge proceeding from the hind border and shortly dividing into two distinct curved ridges which join the fore border: three ridges on the scutcheon, the side pair curved and more distinct than the middle one: hind-chest tawny, ridged across: abdomen obconical, luteous, longer than the chest, furnished at the tip with an apparatus which consists of twelve appendages; the first is long, channelled, curved downward for much more than half its length, and then emits a little appendage above, and is armed with two teeth beneath; it next inclines upward at a right angle and widens into an obconical deflexed plate with a notch at its tip: the second and the third are a pair which form two stout upright spines beneath the curve of the first: the fourth and the fifth are another pair, which are more short and obtuse and form right angles between the preceding pair and the base of the first: at the tip beneath there are three pairs of various length, which are inclined upward beneath the plate of the first:

the inner pair are the longest and between them is the twelfth which is long and spindle-shaped: legs red, stout, furrowed; hind-shanks armed with stout spines: fore-wings nearly colourless, slightly tinged with yellow: more than one-third of the surface from the base is yellowish-brown, tinged here and there with black, and includes a colourless spot; towards the tip the wing is also yellowish-brown with the exception of two colourless spots; the reticulated part occupying about a third of the length; veins tawny; hind-wings colourless, brown towards the tips and along the hind border. Length of the body 6 lines; of the wings 16 lines.

a. Port Essington. From Mr. Gould's collection.

### 15. EURYBRACHYS RUBIGINEA, Fem.

*Ferruginea maculis obscurioribus; metathorax fulvus, flavo varius; abdomen fulvum, flavo et fusco fasciatum; pedes rufi; alæ anticae rufo-fulvae, nigro trimaculatae, apice subfuscae maculisque flavis et limpidis ornatae; alæ posticae flavo aut fulvo-limpidae, apice fuscae, margine postico albidae.*

Body ferruginous, indistinctly marked with darker colour; head as broad as the chest; crown very short, surrounded by a very slight ridge, slightly convex in front; face finely rugulose, very broad, surrounded by a slight ridge, scutcheon-shaped, forming an angle on each side, and having on the middle of its fore border a concavity where it joins the epistoma: mouth ferruginous, reaching the hind-hips: shield very short; concave along the hind border: hind-chest tawny, partly yellow, ridged transversely: abdomen tawny, obconical, a little longer than the chest, adorned with indistinct yellow and brown bands, thickly clothed at the tip with white filaments: legs red, stout, clothed with very short black hairs; hind-shanks armed with stout spines: fore-wings tawny, tinged with pale brown in the reticulated part where there are a few pale yellow and colourless irregular spots; a black spot on the hind border near the tip, and one or two smaller black spots in the disk nearer the base; veins red, bordered also with red in the basal region which occupies much more than half the length of the wing, and at a distance appears wholly red: hind-wings transparent, tinged with yellow or tawny, brown towards the tip, whitish along the hind border; veins ferruginous. Length of the body  $5\frac{1}{2}$ —6 lines; of the wings 14—15 lines.

a. New Holland. Presented by the Haslar Hospital.

b. ——— ?

## 16. EURYBRACHYS SEMILIMPIDA, Mas.

*Fulva*: *pedes ferruginei*; *alæ anticæ fulvæ, fusco nebulosæ, fasciis duabus flavo-limpidis ornatæ*; *alæ posticæ sublimpidæ, apice fuscæ*.

Body tawny, slightly shining, hardly rugulose: head as broad as the chest, its breadth more than twice its length; crown short, slightly curved, surrounded by a ridge; face broad, flat, pale tawny, scutcheon-shaped, surrounded by a slight ridge, adorned with a black half interrupted band, concave in the middle of the suture where it joins the epistoma which is luteous: mouth tawny, reaching the hind-hips, clothed with short pale hairs; third joint less than half the length of the second: eyes hardly prominent: disk of the chest mostly ferruginous: fore-chest very short, convex in front: scutcheon of the middle-chest with three ridges; the side pair curved, meeting on the fore border: hind-chest short, with transverse yellow ridges: abdomen obconical, hardly longer than the chest; sexual apparatus like that of *sera*: legs ferruginous, broad, furrowed; hind-shanks armed with stout spines: fore-wings tawny, slightly clouded with brown across the middle and about the tip, having two irregular and interrupted nearly colourless bands, one broad, tinged with yellow, and in the disk, the other near the tip, narrower and less coloured; reticulated part occupying more than one-third of the surface; veins tawny: hind-wings nearly colourless, brown towards the tips; veins tawny, darker towards the tips. Length of the body 4 lines; of the wings 12 lines.

*a.* New Holland. Presented by the Haslar Hospital.

*b, c.* ———?

## 17. EURYBRACHYS SEMISICCA, Fem.

*Ferruginea fulvo maculata*; *abdomen fulvum, basi ferrugineum, lateribus apice et segmentorum marginibus posticis subtile viride*; *pedes ferruginei, nigro maculati*; *alæ anticæ ferrugineæ nigro varicæ, apice fulvæ maculisque limpidis ornatæ*; *alæ posticæ subfuscæ, margine antice limpida, apice fuscæ*.

Body ferruginous, dull, minutely rugulose, adorned with tawny spots: head as broad as the chest, its breadth more than twice its length; crown short, slightly curved, surrounded by a ridge; face broad, flat, surrounded by a slight ridge, transversely elliptical with the exception of a concavity on the fore part of each side, along this there is a slight curved ridge communicating with a more dis-

tinct ridge which runs parallel to the fore border (the same in *sicca*, *sera* and *rubiginea*): concave in the middle of the suture where it joins the epistoma: mouth ferruginous, reaching the hind-hips: eyes hardly prominent: fore-chest short, slightly arched: scutcheon of the middle-chest having on each side an indistinct slightly curved ridge which joins the fore border: hind-chest short, transversely ridged: abdomen tawny, nearly elliptical, a little longer than the chest, ferruginous at the base, bright green on each side towards the tip which is thickly clothed with white filaments; hind borders of the under segments bright green: legs ferruginous, stout, furrowed, marked with black; hind-shanks armed with broad spines: fore-wings ferruginous, adorned with various black marks, tawny, reticulated and variegated with colourless spots for more than one-third of the length from the tips; veins ferruginous: hind-wings pale brown, colourless along the fore border till near the tips which are brown; veins brown. Length of the body  $3\frac{1}{2}$  lines; of the wings  $10\frac{1}{2}$  lines.

#### 18. EURYBRACHYS LEUCOSTIGMA, Fem.

*Ferruginea nigro varia; abdominis latera apice lutea; pedes rufi; alæ anticæ ferrugineæ maculis tribus nigris subfasciatæ, apice fusco-fulvæ albo et nigro ad marginem maculatæ; alæ posticæ fulvæ, apice fuscæ albo maculatæ, margine postico fuscæ fulvo maculatæ.*

Body ferruginous, dull, minutely rugulose, adorned with black marks: head as broad as the chest, its breadth more than twice its length; crown short, slightly curved, surrounded by a ridge; face broad, flat, tawny, not marked with black, surrounded by a slight ridge, scutcheon-shaped, concave in the middle of the suture, where it joins the epistoma which is red: mouth tawny, clothed with short black hairs, reaching the middle-hips; third joint brown, about half the length of the second: eyes hardly prominent: fore-chest short, luteous and convex in front, having a short cross-ridge which joins the fore border on each side and includes with it a spindle-shaped compartment: scutcheon of the middle-chest with three very indistinct ridges, the side pair curved: hind-chest short, transversely ridged: abdomen obconical, not longer than the chest, luteous on each side towards the tip which is thickly clothed with white filaments; legs broad, red, furrowed; feet blackish; hind-shanks armed with stout black-tipped spines: fore-wings ferruginous, adorned with three black spots which form an interrupted band across the middle; reticulated part mostly tawny, brown at the tip, occupying more than

one-third of the surface, adorned with black and white marks along the border; veins ferruginous: hind-wings tawny, dark brown along the hind border and towards the tip, where there is a white spot; a tawny spot on the hind border; veins ferruginous, brown towards the tips. Length of the body  $3\frac{1}{2}$  lines; of the wings 11 lines.

a. New Holland. Presented by the Haslar Hospital.

#### 19. EURYBRACHYS DECEMMACULA, Mas.

*Ferruginea; caput subtus viridi-fulcum; metathorax flavo varius; pedes ferruginei; alæ anticæ ferrugineæ nigro quinquemaculate, ad costam et apicem cinereæ; alæ posticæ subnigræ.*

Body ferruginous, very broad: head as broad as the chest: crown dull tawny, tinged with green, finely striated, slightly convex in front, equally concave behind, its breadth about six times its length; front large, flat, scutcheon-shaped, tawny, tinged with green, concave where it joins the epistoma which is small: mouth ferruginous: fore-chest much longer than the crown, nearly straight on the hind border, convex in front where it has a double rim: middle-chest nearly triangular, about twice the length of the fore-chest: hind-chest partly yellow: abdomen obconical, not longer than the chest: legs ferruginous, broad; their ridges bristly; a stout spine on each hind-hip; hind-shanks armed with three black spines: fore-wings ferruginous, pale gray along the fore border, dark gray at the tips, adorned with five black spots; three on the fore border, and two at the tip; the third smaller than the others; veins ferruginous, slightly dotted with brown towards the tips; a row of short parallel cross-veins along the fore border: hind-wings and their veins blackish, paler at the base. Length of the body  $3\frac{1}{2}$  lines; of the wings 12 lines.

a. New Holland. From Mr. Lambert's collection.

#### 20. EURYBRACHYS DECISA, Mas.

*Ferruginea; metathorax luteo varius; abdomen nigrum, basi luteum; segmentorum margines postici lutei; pedes ferruginei; alæ anticæ latè glauco-ferrugineæ, fulvo fasciatae, ad costam nigro trimaculate, apicem versus nigrum guttis albis fasciatae; alæ posticæ subnigræ.*

Body dark ferruginous, broad: head as broad as the chest; crown finely striated, surrounded by a rim which is black in front and behind, slightly convex on the fore border, equally concave on



the hind border, its breadth about six times its length; front large, nearly flat, broader than long, slightly rugulose, surrounded by a rim within which is a semicircular ridge whose ends disappear on approaching the epistoma, the latter is pitchy: fore-chest longer than the crown, very convex in front, very slightly concave on the hind border: middle-chest nearly triangular: hind-chest partly luteous: abdomen black, obconical, a little longer than the chest, luteous at the base and on the hind border of each segment: sexual apparatus like that previously described: legs ferruginous, broad; their ridges bristly; a stout spine on each hind-hip; hind-shanks armed with three long spines: fore-wings bright ferruginous, with a glaucous tinge which is most prevalent beneath, brown towards the tips which are black; near them is a cross row of white dots; fore border adorned with three black spots, and beyond them with a white spot; a more indistinct black spot on the hind border; a broad tawny band tinged with white across the middle of the wing; veins tawny, darker towards the tips; the usual row of short cross-veins along the fore border: hind-wings and their veins blackish. Length of the body 3 lines; of the wings 9 lines.

a. New Holland. From Mr. Lambert's collection.

## 21. EURYBRACHYS LURIDA, Fem.

*Picea*; *abdominis segmentorum margines postici fulvi*; *pedes nigri*; *ala antice ferruginea, nigro fasciata, apice nigra albo guttata*; *ala postice nigra*.

Body pitchy, broad: head as broad as the chest; crown slightly arched, somewhat depressed, striated lengthwise; its breadth about six times its length: front scutcheon-shaped, broader than long, very slightly convex, tuberculate, deeply concave where it joins the epistoma which is rhomboidal, almost smooth, and has a longitudinal ridge: fore-chest convex on the fore border, straight behind, transverse, half oval, a little longer than the head: middle-chest with a slight middle ridge, and a ridge along the sides of the angle: abdomen black, longer than the chest, furnished with a large mass of white filaments; hind borders of the segments tawny: legs black, very broad: hind-shanks armed with three stout teeth: fore-wings ferruginous, slightly tinged with blue; a curved black band in the middle; their tips black with two or three white dots and a short somewhat zigzag tawny band; veins ferruginous: hind-wings black. Length of the body  $3\frac{1}{2}$  lines: of the wings 9 lines.

## 22. EURYBRACHYS RUBICUNDA, Mas.

*Picca, ferrugineo varia; pectus, metathorax et abdomen rufa; pedes nigri; femora postica rufa; tibiæ posticæ ferruginæ; alæ anticæ ferruginæ, nigro marginatæ, apicæ maculis duabus limpidis ornatæ; alæ posticæ subnigræ, apicæ albo unimaculatæ.*

than six times its length; front scutcheon-shaped, slightly rugulose, bordered by a rim, slightly concave where it joins the epistoma; its breadth almost twice its length; epistoma short, nearly triangular: mouth ferruginous: middle-chest much longer than the fore-chest, almost triangular, with two oblique ridges; hinder sides slightly concave: breast, hind-chest and abdomen bright red, the latter obconical, a little longer than the chest: laminae pale straw-colour, powdered with white: legs black, hind-thighs red with black tips; hind-shanks dark ferruginous, armed with three long stout spines: fore-wings ferruginous, black along the fore border and at the tips and partly along the hind border: a few ferruginous dots in the black part; a tawny spot on the hind border and two large colourless spots near the tip which is bristly; veins ferruginous, black towards the tips: hind-wings blackish with a white spot near the tip of the fore border; veins black. Length of the body  $2\frac{1}{2}$  lines; of the wings 8 lines.

a. Sandy Cape, New Holland. Presented by the Earl of Derby.

## 23. EURYBRACHYS LÆTA.

*Eurybrachys læta, White, Eyre's Exped. Austral. 1. Appendix 433, pl. 4, f. 3.*

a. New Holland. Presented by the Entomological Club.

## 24. EURYBRACHYS SUBFASCIATA, Mas et Fem.

*Testacea, conspersa; pedes rufi; femora postica flava; alæ anticæ fulvo-ferruginæ, apicæ nigro maculatæ; alæ posticæ sublimpidæ aut subfusca, apicæ subnigræ albo fasciatæ.*

Body short, broad, testaceous, sprinkled with darker colour: head as broad as the chest; crown very slightly arched, with an in-

distinct ridge along the border; its breadth full six times its length; front short, flat, forming an acute angle on each side, not concave where it joins the epistoma but forming an obtuse inward angle on each side, near which it has two slight oblique furrows; its breadth much more than twice its length; epistoma triangular, slightly convex: mouth ferruginous: eyes produced into a spine on each side: fore-chest very slightly convex on the fore border, straight behind, a little longer than the front: middle-chest longer than the fore-chest, subtriangular, its hinder sides concave: breast and hind-chest red: abdomen obconical, as long as the chest: fore legs and middle legs red, very broad: hind-legs slender, dark red; hind-thighs mostly pale yellow; hind-shanks armed with four stout spines whose tips are black: fore-wings pale ferruginous, partly tawny, adorned at the tips with a few black spots of various size and varying in each insect; veins ferruginous: hind-wings almost colourless or slightly tinged with brown, blackish with a white band towards the tips; veins tawny. Length of the body  $2\frac{1}{2}$ —3 lines; of the wings 7—8 lines.

a. North Bengal. From Miss Campbell's collection.

b, c. North India. From Mr. Warwick's collection.

d. India. From Mr. Sowerby's collection.

## 25. EURYBRACHIUS DILATATA, Mas.

*Ferruginea, nigro conspersa; abdomen piccum, basi ferrugineum, flavo bittatum; segmentorum margines postici subtus flavi; pedes rufi nigro varii; femora postica flavo vittata; alæ anticae ferrugineae, conspersae, apice fusco guttatae; alæ posticae fuscae, apice nigro-fuscae albo fasciatae.*

Body short, broad, ferruginous, sprinkled with black: head full as broad as the chest; crown very slightly arched, somewhat depressed, its breadth four times its length; front testaceous, transverse, bordered by a slight rim, produced into an acute angle on each side, hardly concave where it joins the epistoma: its breadth nearly thrice its length; epistoma pitchy, triangular, keeled: mouth pitchy: eyes produced into a spine on each side: fore-chest a little longer than the middle-chest, almost transversely semifusiform: middle-chest (excepting the scutcheon) as long as the fore-chest, and forming with it a spindle-shaped compartment; scutcheon small, triangular: abdomen pitchy, obconical, a little longer than the chest, ferruginous at the base; hind borders of the segments pale yellow beneath; a yellow stripe along each side: legs red, very broad, varied with black; a short yellow stripe beneath each hind-thigh near the tip; hind-

shanks and hind-feet mostly black, the former armed with four stout spines: fore-wings ferruginous, sprinkled with brown, adorned at each tip with about fifteen brown dots, very convex on the fore border near the base; veins ferruginous: hind-wings brown, blackish-brown towards the tips with an oblique white band. Length of the body  $2\frac{1}{2}$  lines: of the wings 8 lines.

α. Ceylon. Presented by Dr. J. Hooker

## 26. ECRYBRACHYS APICALIS, MAS.

*Ferruginea; metathorax et abdomen rufa; pedes nigri rufo varii, tibiae posticae pallide rufae; alae anticae ferrugineae, nigro guttatae, apices nigre; alae posticae testaceae, apices nigrae.*

Body ferruginous, short, broad: head nearly as broad as the chest; crown slightly arched, flat, its breadth more than four times its length; a slight curved furrow accompanied with a row of impressions along each side near the eye; front pitchy, slightly convex, broader than long, angular on each side, convex where it joins the epistoma, very minutely and thickly striated; epistoma darker, almost triangular, keeled and ferruginous towards the mouth: fore-chest slightly convex on the fore border, straight behind, as long as the crown, transversely semifusiform; its breadth much more than four times its length: middle-chest almost triangular, much longer than the fore-chest: hind-chest red: abdomen red, obconical, longer than the chest; tip tawny: legs black, very broad, slightly marked with red; hind-shanks pale red, armed with three stout teeth: fore-wings ferruginous with some little black marks in the middle; tips black; veins ferruginous: hind-wings testaceous with black tips; veins tawny. Length of the body  $2\frac{1}{2}$  lines; of the wings 6 lines.

α. North-west Coast of New Holland. From M. Dring's collection.

## 27. ECRYBRACHYS BUFO, MAS.

*Nigra rufa varia; abdomen subtus rufum; pedes nigri, rufo varii; femora et tibiae posticae rufa; alae anticae nigre, apud marginem posticum ferrugineae, ad costam albo maculatae, apice maculis duabus limpidis ornatae.*

Body black, slightly varied with red, very short, broad and thick: head as broad as the fore-chest; crown depressed, straight in front, slightly concave on the hind border, bordered with red, with a red spot on each side of the disk; its breadth about six times its length; front slightly rugulose, much broader than long, angular on

each side, very concave where it joins the epistoma, with a very slender curve on each side near the eye; epistoma nearly triangular, ferruginous, slightly keeled: fore-chest a little longer than the crown, nearly straight behind, slightly convex on the fore border: middle-chest triangular, more than twice the length of the fore-chest, bordered with red, and having three red ridges, the side pair oblique: breast red: abdomen red beneath, obconical, not longer than the chest: legs black, very broad, slightly marked with red; hind-thighs and hind-shanks red, the latter armed with three teeth: forewings black, mostly ferruginous towards the hind border, adorned with a white spot in the middle of the fore border and with two colourless spots near the tip; fore border convex near the base, concave towards the tip; veins ferruginous. Length of the body 2 lines; of the wings 5 lines.

a. New Holland. Presented by the Haslar Hospital.

## 28. EURYBRACHYS VARIA, Mas.

*Nigra, rufo varia; metathorax et abdomen rufa; pedes nigri; femora postica rufa, nigra vittata et apice fasciata; tibiæ posticæ ferrugineæ; alæ anticæ nigre, angustæ, subtuberculatæ, basè rufo varicæ, disco fulvo fasciatæ, apicè fascia limpidè ornata; alæ posticæ nullæ?*

Body black, varied with red: head narrower than the chest; crown somewhat depressed, very slightly arched, bordered with red; its breadth about four times its length; front very large, a little broader than long, rather depressed, much rounded on each side, angular where it joins the epistoma, with a slight longitudinal ridge which is traversed by a furrow; fore border red: epistoma ferruginous, triangular: eyes very prominent: fore-chest slightly convex on the fore border, straight behind, a little longer than the crown: middle-chest triangular, longer than the fore-chest: hind-chest and abdomen bright red: abdomen obconical, not longer than the chest; sexual appendages black: legs black, very broad; hind-thighs red, striped with black and with a black band near the tips; hind-shanks ferruginous, armed with three stout spines: fore-wings black, horizontal, narrow especially towards the tips, slightly tuberculate, bristly, partly red towards the base, with a tawny band in the middle and a colourless band near the tip, the bands irregular and accompanied by some dots of their respective colours; veins tawny and black, few and very robust: hind-wings wanting? Length of the body 1 line; of the wings 4 lines.

a. New Holland. Presented by the Haslar Hospital.

## Genus 8. CORETHRURA.

*Corethrura*, *Hope*, *Trans. Linn. Soc.* xix. 135.

## 1. CORETHRURA FUSCOVARIA.

*Corethrura fuscovaria*, *Hope*, *Trans. Linn. Soc.* xix. 135, pl. 12, f. 10.  
Silhet.

## Genus 9. ANCYRA.

*Ancyra*, *White*, *Ann. Nat. Hist.* xv. 34.

## 1. ANCYRA APPENDICULATA.

*Ancyra appendiculata*, *White*, *Ann. Nat. Hist.* xv. 34.  
*a, b.* East India. From Archdeacon Clerk's collection.

## Genus 10. BRUCHOMORPHA.

*Bruchomorpha*, *Newman Ent. Mag.* v. 399.

## 1. BRUCHOMORPHA OCLATA.

*Bruchomorpha oculata*, *Newman, Ent. Mag.* v. 399.  
*a.* St. John's Bluff, Florida. Presented by E. Doubleday, Esq.

## Genus 11. CALISCCELIS.

*Caliscelis*, *De Laporte*, *Ann. Soc. Ent. Fr.* ii. 251.  
*Fulgora*, *Latr.*  
*Eurybrachys*, *Guérin.*  
*Derbe*, *Herrich.-Schäffer.*

## 1. CALISCCELIS BONELLII.

*Caliscelis Bonellii*, *Spin. Ann. Soc. Ent. Fr.* viii. 371, pl. 17, f. 1.  
*Amyot et Serv. Hist. Nat. Hém.* 509, 1.  
*Fulgora Bonellii*, *Latr. Gen.* iii. 166, 1.

*Derbe Bonellii*, *Herr-Schäff. Nom. Ent.* i. 65.

*Eurybrachys Bonellii*, *Guér. Voy. Belanger*, 467.

*Caliscelis heterodoxa*, *Delap. Ann. Soc. Ent. Fr.* ii. 251, pl. 9, A.  
*Burm. Handb. Ent.* ii. 1, 159. *Blanch. Hist. Nat. Ins.* iii.  
 174, 1.

*Caliscelis*, *Amyot, Ann. Soc. Ent. Fr. 2me Série*, v. 167, 394.

South of Europe.

## Sub-Tribe 2. DERBOIDES.

*Derboïdes*, *Spin. Ann. Soc. Ent. Fr.* viii. 204, 377.

*Derbides*, *Amyot et Serville*.

*Derbidæ*, *Schaum*.

## Genus 1. DERBE.

*Derbe*, *Fabr. Syst. Rhyn.* 80.

### 1. DERBE NERVOSA.

*Derbe nervosa*, *Klug. Stoll, Cic.* 109, pl. 27, f. 161. *Burm. Handb.*  
*Ent.* ii. 1, 154, 1. \*

### 2. DERBE HÆMORRHOIDALIS.

*Derbe hæmorrhoidalis*, *Fabr. Syst. Rhyn.* 80, 1. *Stoll, Cic.* 109, pl.  
 27, f. 160. *Perch. Mag. Zool. Sect.* ix. 36, 2.

South America

### 3. DERBE SEMISTRIATA.

*Derbe semistriata*, *Westw. Linn. Trans.* xix. 4, pl. 1, f. 1.

Brazil.

### 4. DERBE STRIGIPENNIS.

*Derbe strigipennis*, *Westw. Linn. Trans.* xix. 4, pl. 1, f. 2.

Brazil.

### 5. DERBE ESSINGTONII.

*Derbe Essingtonii*, *Westwood*.

a. Port Essington. From Mr. Gould's collection.

## 6. DERBE BICLAVATA.

*Derbe biclavata*, *Westwood*.

*a.* Congo. Presented by Sir J. Richardson.

## 7. DERBE MÆSTA.

*Derbe mæsta*, *Westwood*.

*a, b.* East India.

## 8. DERBE DILATATA.

*Derbe dilatata*, *Westwood*.

## Genus 2. MYSIDIA.

*Mysidia*, *Westw. Trans. Linn. Soc.* xix. 7.

*Derbe*, *Fabr. Germar, Burm. Perchéron, Spinola*.

## 1. MYSIDIA PALLIDA

*Mysidia pallida*, *Westw. Trans. Linn. Soc.* xix. 7.

*Derbe pallida*, *Fabr. Syst. Rhyn.* 81, 2. *Perch. Mag. Zool. Ins.*  
*Sect. ix.* pl. 36, f. 1. a—e. *Spin. Soc. Ent. Fr.* viii. 379, 1.

South America.

## 2. MYSIDIA ALBIPENNIS.

*Mysidia albipennis*, *Westw. Linn. Trans.* xix. 7, pl. 1, f. 3.

*a.* Honduras. From Mr. Dyson's collection.

## 3. MYSIDIA LACTIFLORA

*Mysidia lactiflora*, *Westw. Linn. Trans.* xix. 8, pl. 1, f. 4.

Brazil.

## 4. MYSIDIA PALLIDA.

*Mysidia pallida*, *Westw. Trans. Linn. Soc.* xix. pl. 1, f. 51.

Brazil.



5. *MYSIDIA SUBFASCIATA*.

*Mysidia subfasciata*, *Westw. Trans. Linn. Soc.* xix. 19.  
Brazil.

6. *MYSIDIA COSTALIS*.

*Derbe costata*, *Fabr. Syst. Rhyn.* 81, 4. *Burm. Handb. Ent.* 154.  
*Derbe squamigera*, *Fabr. Syst. Rhyn.* 81, 3.  
*a. Para.* Presented by J. P. G. Smith, Esq.

7. *MYSIDIA ? PUNCTUM*.

*Derbe punctum*, *Fabr. Syst. Rhyn.* 82, 5.  
South America.

8. *MYSIDIA ? TESTACEA*.

*Derbe testacea*, *Fabr. Syst. Rhyn.* 82, 6.  
South America.

9. *MYSIDIA ? NIVEA*.

*Derbe nivea*, *Fabr. Syst. Rhyn.* 82, 7.  
*a. Para.* Presented by J. P. G. Smith, Esq.  
*b. Brazil.* From Mr. Stevens' collection.

10. *MYSIDIA SIGMA*.

*Derbe stigma*, *Germar.*  
Montevideo.

Genus 3. *PHENICE*.

*Phenice*, *Westw. Linn. Trans.* xix. 10.  
*Derbe*, *Boheman, Amyot et Serville.*

1. *PHENICE FRITILLARIS*.

*Phenice fritillaris*, *Westw. Linn. Trans.* xix. 11.  
*Derbe fritillaris*, *Boh. Kongl. Vet. Acad. Handl.* 1838.  
Guinea.

## 2. PHENICE LUNULATA.

Derbe lunulata, *Amyot et Serv. Hist. Nat. Hém.* 515, 1.  
Isle of France.

## 3. PHENICE STELLULATA.

Phenice stellulata, *Westw. Linn. Trans.* xix. 11.  
Derbe stellulata, *Boh. Kongl. Vet. Acad. Handl.* 1838  
Guinea.

## 4. PHENICE FASCIOLATA.

Phenice fasciolata, *Westw. Linn. Trans.* xix. 11, pl. 2, f. 3.  
Derbe fasciolata, *Boh. Kongl. Vet. Acad. Handl.* 1848.  
Guinea.

## Genus 4. CENCHREA.

Cenchrea, *Westw. Trans. Linn. Soc.* xix. 15.

## 1. CENCHREA DORSALIS.

Cenchrea dorsalis, *Westw. Trans. Linn. Soc.* xix. 15, pl. 2, f.  
Isle St Vincent

## Genus 5. LABICERUS.

Labicerus, *Erich. Schomb. Reise, Brit. Guiana*, 614.

## 1. LABICERUS ELEGANS.

Labicerus elegans, *Erich. Schomb. Reise, Brit. Guiana*, 614.  
British Guiana.

## Genus 6. THRACIA.

Thracia, *Westw. Linn. Trans.* xix. 10.  
Derbe, *Boheman*.

## 1. THRACIA SINUOSA.

*Thracia sinuosa*, *Westw. Linn. Trans.* xix. 10, pl. 2, f. 2.

*Derbe sinuosa*, *Boh. Kongl. Vet. Acad. Handl.* 1838.

Sierra Leone.

## 2. THRACIA JAVANICA.

*Thracia Javanica*, *Westw. Trans. Linn. Soc.* xix. 19, pl. 2, f. 9.

Java.

## 3. THRACIA NERVOSA.

*Derbe nervosa*, *Boh. Kongl. Vet. Acad. Handl.* 1838.

*Thracia Bohemanni*, *Westw. Linn. Trans.* xix. 10.

Sierra Leone.

## Genus 7. PATARA.

*Patara*, *Westw. Trans. Linn. Soc.* xix. 14.

## 1. PATARA GUTTATA.

*Patara guttata*, *Westw. Trans. Linn. Soc.* xix. 14, pl. 2, f. 6.

Isle St. Vincent.

## 2. PATARA ALBIDA.

*Patara albida*, *Westw. Trans. Linn. Soc.* xix. 14, pl. 2, f. 7.

Isle St. Vincent.

## Genus 8. DIOSPOLIS.

*Diospolis*, *Westw. Linn. Trans.* xix. 9.

*Lydda*, *Westw. Proc. Linn. Soc.* 84.

*Cicada*, *Fabr.*

## 1. DIOSPOLIS ELONGATA.

*Diospolis elongata*, *Westw. Linn. Trans.* xix. 9, pl. 2, f. 1.

*Cicada elongata*, *Fabr. Ent. Syst.* iv. 34, 29.

*Derbe elongata*, *Syst. Rhyn.* 82, 8.

New South Wales.

## Genus 9. ZEUGMA.

*Zeugma*, *Westw. Trans. Linn. Soc.* xix. 20.

## 1. ZEUGMA VITTATA.

*Zeugma vittata*, *Westw. Trans. Linn. Soc.* xix. 21, pl. 2, f. 10.

## Genus 10. HYNNIS.

*Hynnis*, *Burm. Handb. Ent.* 153.

*Otiocerus*, *Kirby, Westw.*

## 1. HYNNIS ROSEA.

*Hynnis rosea*, *Burm. Handb. Ent.* ii. 1, 154, 1.

*Otiocerus Degeeri*, *Kirby, Linn. Trans.* xiii. *Westw. Linn. Trans.* xix. pl. 2, f. 4.

*a.* St. John's Bluff, Florida. Presented by E. Doubleday, Esq.

*b—f.* Nova Scotia. From Lieut. Redman.

## Genus 11. OTIOCERUS.

*Otiocerus*, *Kirby, Trans. Linn. Soc.* xiii. 16.

*Cobax*, *Germar.*

## 1. OTIOCERUS STOLLII.

*Otiocerus Stollii*, *Kirby, Trans. Linn. Soc.* xiii. 16, 2. *Burm. Handb. Ent.* ii. 1, 153, 1. *Spin. Ann. Soc. Ent. Fr.* viii. 383, 1. *Blanch. Hist. Nat. Ins.* iii. 176. *Angot et Serv. Hist. Nat. Hém.* 514, 1.

*Cobax Winthemi*, *Germ. Mag.* iv. 5, 1, pl. 1, f. 7.

United States.

## 2. OTIOCERUS COQUEBERTII.

*Otiocerus Coquebertii*, *Kirby, Linn. Soc.* xiii. *Westw. Linn. Trans.* xix. pl. 2, f. 5. *Crochard, Ed. Règne, Anim. Ins.* pl. 97. f. 1.

*a—f.* Nova Scotia. From Lieut. Redman's collection.

## 3. OTIOCERUS ABBOTII.

*Otiocerus Abbotii*, *Kirby, Trans. Linn. Soc.* xiii.

United States.

## 4. OTIOCERUS FRANCILLONI.

Otiocerus Francilloni, *Kirby, Trans. Linn. Soc.* xiii.  
United States.

## 5. OTIOCERUS REAUMURII.

Otiocerus Reaumurii, *Kirby, Trans. Linn. Soc.* xiii.  
United States.

## 6. OTIOCERUS WOLFII.

Otiocerus Wolfii, *Kirby, Trans. Linn. Soc.* xiii.  
United States.

## 7. OTIOCERUS SCHELLENBERGII.

Otiocerus Schellenbergii, *Kirby, Trans. Linn. Soc.* xiii.  
United States.

## Genus 12. DERIBIA.

Deribia, *Westw. Trans. Linn. Soc.* xix. 13.  
*Anotia, Guérin.*

## 1. DERIBIA COCCINEA.

Deribia coccinea, *Westw. Trans. Linn. Soc.* xix. 1, 13.  
*Anotia coccinea, Guér. Voy. Ind. Orient. Belanger, 162. Icon. Rég.*  
*Anim. Ins.* pl. 58, f. 13. *Voy. Coquille, Zool.* 169.

## Genus 13. ANOTIA.

*Anotia, Kirby, Trans. Linn. Soc.* xiii. 21.

## 1. ANOTIA BONNETII.

*Anotia Bonnetii, Kirby, Trans. Linn. Soc.* xiii. 21, pl. 1, f. 15.  
*Burm. Handb. Ent.* ii. 1, 153, 1. *Spin. Ann. Soc. Ent. Fr.*  
viii. 385. *Crochard, Ed. Régne, Anim. Ins.* pl. 97, f. 7.  
Georgia.

## Sub-Tribe 3. FLATOIDES.

Flatoïdes, *Spin. Ann. Soc. Ent. Fr.* viii. 204, 387.  
 Strigimargines Acanorides, *Amyot et Serville*.  
 Strigimargines Flatides, *Amyot et Serville* (ad partem).  
 Strigimargines Ricanides, *Amyot et Serville*.  
 Flatidæ, *Schaum*.

## Genus 1. LOPHOPS.

Lophops, *Spin. Ann. Soc. Ent. Fr.* viii. 387.

## 1. LOPHOPS SERVILLEI.

Lophops Servillei, *Spin. Ann. Soc. Ent. Fr.* viii. 388, pl. 10, f. 3.  
*Amyot. et Serv. Hist. Nat. Hém.* 527, 1.  
 Africa.

## Genus 2. ELASMOCELIS.

Elasmocelis, *Spin. Ann. Soc. Ent. Fr.* viii. 388.  
 Ricania, *Germar*.

## 1. ELASMOCELIS CIMICOIDES,

Elasmocelis cimicoïdes, *Spin. Ann. Soc. Ent. Fr.* viii. 391, pl. 16,  
 f. 4.  
 Ricania cimicoïdes, *Germ. Cat. Dregé. No.* 1662.  
*a, b.* Cape. From M. Dregé's collection.

## 2. ELASMOCELIS TRIMACULATUS.

*Piccus*; caput viridescens; frons bicarinatus, rufo trivittatus;  
 epistoma nigrum, tricarinatum; thorax non carinatus; pedes  
 nigri; alæ anticae nigro-fuscaë, maculis quatuor limpidis ad  
 marginem ornata; alæ posticae fuscaë, basi sublimpidaë.

Body pitchy: head greenish; crown narrow, having on each side a high ridge whose edge is brown; front narrow, with two ridges, adorned with three bright red stripes; epistoma black, pointed, with three ridges: chest not ridged: abdomen obconical, a little longer than the chest: legs black, broad; fore-thighs and fore-shanks very

much dilated: fore-wings very dark brown, with two colourless spots on the fore border, the first much larger than the second; a narrow transverse colourless spot along the tip, and a colourless dot near the tip of the hind border: hind-wings brown, almost colourless towards the base; veins brown, paler in the colourless part. Length of the body 3 lines; of the wings 7 lines.

*a.* Sierra Leone. Presented by the Rev. D. F. Morgan.

### Genus 3. FLATOIDES

*Flateides*, *Guér. Icon. Régn. Anim. Texte*, 362.

*Cicada*, *Fabr.*

*Ricania*, *Germar, Burmeister.*

*Flata*, *Fabr., Guérin.*

#### 1. FLATOIDES TORTRIX.

*Flata?* *tortrix*, *Guér. Icon. Régn. Anim. Texte*, 362.

Madagascar.

#### 2. FLATOIDES FENESTRATA.

*Flata fenestrata*, *Fabr. Syst. Rhyn.* 51, 28.

Java.

#### 3. FLATOIDES HYALINA.

*Ricania hyalina*, *Germ. Mag. Ent.* iii. 224, 2. *Burm. Handb. Ent.* ii. 1, 161, 2.

*Cicada hyalina*, *Fabr. Ent. Syst.* iv. 40, 59. *Stoll, Cic.* 75, pl. 19, f. 102.

*Flata hyalina*, *Fabr. Syst. Rhyn.* 51, 24.

*a.* Ceylon. Presented by Dr. J. Hooker

#### 4. FLATOIDES PELOPS, Mas?

*Ferrugineus, subtus flavo-albus: frons fusco varius, tricarinatus; epistoma fusco trivittatum; mesothorax tricarinatus; pedes fulvi; alæ nigro-fusce, latissimæ; alæ anticæ apice limpidæ.*

Body ferruginous, yellowish-white beneath: head nearly as broad as the chest; crown somewhat rugulose, surrounded by a rim,

very short in the middle, angular and much lengthened backward on each side; front blackish brown along the crown, having two brown spots on each side where it is rounded, very slightly increasing in breadth towards the epistoma; its length hardly exceeds its breadth; its side ridges are high; its middle ridge is very slight, and disappears near the epistoma which is lanceolate and has three brown stripes: fore-chest surrounded by a rim, and having a middle ridge, concave on the hind border, truncate, conical in front and advancing near to the fore border of the crown: middle-chest flat on the disk, full four times the length of the fore-chest, with three slight ridges, the side pair curved and united in front: abdomen obconical, not longer than the chest: legs tawny: wings dark brown, very broad, extending far beyond the tip of the abdomen; tips of fore-wings colourless; veins dark brown, much ramified in the disk, extremely numerous towards the tips; fore border dilated, convex, along it is a row of oblique parallel cross-veins. Length of the body 4 lines; of the wings 12 lines.

4. Para. From Mr. Stevens' collection.

#### 5. FLATOIDES HUMERALIS, MRS.

*Ferrugineus, subtus flavo-albus; frons fusco varius, tricarinatus; epistoma fusco trivittatum; mesothorax tricarinatus; pedes fulvi; alæ fuscae, latissimæ; alæ anticae maculis quatuor limpidis ornatae.*

Body ferruginous, yellowish-white beneath: head nearly as broad as the chest; crown somewhat rugose, surrounded by a rim, very short in the middle, angular and much lengthened backward on each side; front brown along the crown, having two brown spots on each side where it is rounded, hardly increasing in breadth towards the epistoma; its length scarcely exceeds its breadth: its side ridges are high; its middle ridge is very slight, and does not extend beyond half the length from the crown; epistoma lanceolate, with three brown stripes: fore-chest surrounded by a rim, with a middle ridge which does not extend to the fore border, slightly concave on the hind border, truncate-conical in front, and advancing near to the fore border of the crown: middle-chest with a flat disk, full four times the length of the fore-chest, with three slight ridges, the side pair curved and united in front: abdomen obconical, not longer than the chest: legs tawny: wings brown, very broad, extending far beyond the tip of the abdomen; fore-wings adorned with four colourless spots; one on the disk, large, with three lobes; second large, triangular, on the fore border near the tip; third narrow, extending



along the tip near the fore border; fourth on the tip near the hind border, irregular, and almost divided into four little spots; veins dark brown, much ramified in the disk, extremely numerous towards the tips. fore border dilated, convex, along it a row of oblique parallel cross-veins. Length of the body 4 lines; of the wings 12 lines.

a. Para. From Mr. Stevens' collection.

#### 6. FLATOIDES SPECULUM, Fem.

*Niger; frons carinatus; mesothorax tricarinatus; pedes ferrugini; alæ fuscae, amplæ; alæ anticae maculis quinque limpidis ornatae; alæ posticae pallidiores, guttis sublimpidis ornatae.*

Body black: head as broad as the chest: crown surrounded by a rim, very concave on the hind border, straight in front; its length not one-eighth of its breadth; front broad, rounded but not broader towards the epistoma, slightly concave at the junction, surrounded by a rim and having a slight middle ridge which hardly extends beyond half the length from the crown, rather broader than long; epistoma triangular, with a middle ridge: fore-chest slightly arched, with a middle ridge, about twice the length of the crown: middle-chest full four times the length of the fore-chest, with three ridges, the side pair curved and united in front: abdomen oboconical, not longer than the chest: legs ferruginous: wings brown, ample: fore-wings adorned with five colourless spots; two in the disk; one near them on the fore border, and two along the tip; veins brown, whitish on the colourless parts; longitudinal veins very numerous but hardly ramified; cross-veins few: fore border dilated towards the base where there is a row of oblique parallel cross-veins: hind-wings paler than the fore-wings, with many almost colourless dots. Length of the body 4 lines; of the wings 12 lines.

a. Philippine Islands. From Mr. Cuming's collection.

#### 7. FLATOIDES TENEBROSUS, Mas et Fem.

*Niger; frons et epistoma carinata; prothorax carinatus; mesothorax tricarinatus; abdomen ferrugineum; pedes ferruginei; alæ nigro-fuscae, amplæ, apice guttis albis fasciatae; alæ anticae maculis sex limpidis ornatae.*

Body black; head as broad as the chest: crown surrounded by a rim, slightly concave on the hind border, straight in front; its length not one-eighth of its breadth; front very broad, rounded on

each side, rather narrower in front, slightly concave where it joins the epistoma, surrounded by a rim and having a slight middle ridge: its breadth nearly twice its length; epistoma triangular, with a middle ridge: fore-chest slightly arched, with a middle ridge, about twice the length of the crown: middle-chest about five times the length of the fore-chest, with three ridges; the side pair curved, united in front and behind, and enclosing a flat elliptical compartment: abdomen ferruginous, a little longer than the chest: legs ferruginous: wings blackish-brown, ample: fore-wings adorned with six colourless spots: two in the disk; one near them on the fore border; one on the tip near the fore border, and two close together on the tip near the hind border; sometimes there is a colourless dot near the larger spot on the disk: a row of colourless dots along the tips of the four wings; veins blackish, pale on the spots; longitudinal veins very numerous, the spaces between them thickly ribbed across towards the tips; cross-veins rather numerous; fore border dilated near the base where there is a row of oblique parallel cross-veins. Length of the body 3—4 lines; of the wings 10—12 lines.

*a, b.* China. Presented by G. T. Lay, Esq.

*c* Hong-Kong. Presented by J. C. Bowring, Esq.

*d.* ———?

### 8. FLATOIDES PERFORATES, Fern.

*Niger; frons et epistoma carinata; prothorac carinatus; mesothorac tricarinatus; pedes rufi; femora picea; alae nigro-fusce, cyaneo-albo suffusae; alae anticae maculis quinque limpidis ornatae.*

Nearly allied to the preceding species, but the spots on the wings are very different in form. Body black: head as broad as the chest; surrounded by a rim, slightly tuberculate, slightly concave on the hind border, straight in front; its length not one-eighth of its breadth; front very broad, rounded on each side, rather narrower in front, slightly concave where it joins the epistoma, surrounded by a rim and having a slight middle ridge; its breadth nearly twice its length; epistoma triangular, with a middle ridge: fore-chest slightly arched, with a middle ridge, about twice the length of the crown: middle-chest about five times the length of the fore-chest, with three ridges; the side pair curved, united in front and behind, and enclosing a flat elliptical compartment: abdomen a little longer than the chest: legs dark red; thighs pitchy: wings blackish-brown, ample, tinged with bluish-white; fore-wings adorned with five large colourless spots; two in the disk; one near them on the fore border;

one on the tip near the fore border; the fifth which is larger on the tip near the hind border, including a small brown spot; a row of colourless dots along the tips of the four wings; veins blackish, pale on the spots; longitudinal veins very numerous; cross-veins rather numerous; fore border dilated near the base where there is a row of oblique parallel cross-veins. Length of the body 3 lines; of the wings 10 lines.

*a, b.* ———?

### 9. FLATOIDES GUTTATUS, Mas.

*Niger; frons tricarinatus; epistoma carinatum; prothorax ferrugineus, carinatus; mesothorax quinque-carinatus; pedes fulvi; femora picca; alae nigro-fuscae, amplexae, apice guttis limpidis fasciate; alae anticae maculis tribus limpidis ornatae.*

Body black: head as broad as the fore-chest; crown pitchy surrounded by a rim, slightly concave on the hind border, straight in front; its length not one-eighth of its breadth; front broad, dark ferruginous, rounded on each side, not narrower in front, very slightly concave where it joins the epistoma, surrounded by a rim, and having three slight ridges; its breadth far exceeding its length; epistoma triangular, with a middle ridge: fore-chest ferruginous, with a middle ridge, slightly arched, about twice the length of the crown: middle-chest about five times the length of the fore-chest, with five ridges; the inner pair near the middle one, diverging towards the middle, beyond which they do not extend; outer pair curved, and including a somewhat flat and almost elliptical compartment: abdomen obconical, hardly longer than the chest: legs tawny; thighs pitchy: wings blackish-brown, ample: fore-wings adorned with three colourless spots; one on the disk, round; the second larger, almost triangular, on the fore border near the tip; third as large as the first, on the tip near the fore border; a row of colourless dots along the tips of the four wings; veins blackish, pale on the spots; longitudinal veins very numerous; cross-veins rather numerous; fore border dilated near the base where there is a row of oblique parallel cross-veins. Length of the body 3 lines; of the wings 10 lines.

*a.* Hong-Kong. Presented by J. C. Bowring, Esq.

## 10. FLATOIDES MARGINALIS, Fem.

*Niger; frons et epistoma carinata; prothorax carinatus; mesothorax quinque-carinatus; abdomen obscure ferrugineum; pedes ferruginei; femora picea; alæ nigro-fuscae, amplæ, apice guttis albis fasciatæ; alæ anticæ maculis quinque limpidis ornatae.*

Body black: head as broad as the chest; crown surrounded by a rim, slightly concave on the hind border, straight in front; its length hardly one-eighth of its breadth; front very broad, rounded on each side, narrow towards the epistoma, slightly concave at the junction, surrounded by a rim, and having a middle ridge which does not reach the fore border; epistoma triangular, with a middle ridge: fore-chest with a middle ridge, on each side of which it is somewhat impressed, slightly arched, about twice the length of the crown: middle-chest with five ridges; inner pair curved, and inclosing a somewhat flat and almost elliptical compartment; outer pair short, straight, joining the inner pair before half the length of the chest: abdomen dark ferruginous, as long as the chest: legs ferruginous; thighs pitchy: wings blackish-brown, ample: forewings adorned with five colourless spots; one a dot on the disk; the second very large, triangular, on the fore border near the tip; third much smaller, on the tip, accompanied by two or three colourless dots; fourth and fifth small, irregular, on the tip near the hind border; a row of colourless dots along the tips of the four wings: veins blackish, pale on the spots; longitudinal veins very numerous; cross-veins rather numerous; fore border dilated near the base, where there is a row of oblique parallel cross-veins. Length of the body  $3\frac{1}{2}$  lines; of the wings 12 lines.

a. Africa. From Mr. Sowerby's collection.

## 11. FLATOIDES DISCUS.

*Cervinus; frons transversè subcarinatus; mesothorax luteus, non carinatus; abdomen subtus nonnunquam albidum; pedes albocervini; alæ anticæ cervinae, subtus albo suffusæ, macula maxima obliqua limpidi disco ornata; alæ posticæ cinereæ, basi et ad costam limpidæ.*

Body buff: head nearly as broad as the chest; crown not visible above; front broad, with a slight cross-ridge near the crown, rounded on each side, not narrower towards the epistoma, straight at the junction, a little longer than broad; a middle ridge proceeds from the

cross-ridge to the disk and there ceases; epistoma lanceolate, not ridged: fore-chest slightly arched; its breadth full four times its length: middle-chest luteous, not ridged, full five times the length of the fore-chest: abdomen sometimes whitish beneath, obconical, not longer than the chest: legs buff, tinged with white: fore-wings brown, tinged with white beneath, adorned with a very large oblique colourless spot which extends across the disk, having as it were a very broad border along their tips; fore border convex near the base, beyond which there is a row of almost upright, parallel cross-veins; longitudinal veins very numerous; cross-veins not numerous; hind-wings gray, colourless towards the base and along part of the fore border; veins brown, pale on the colourless part. Length of the body 3 lines; of the wings 10 lines.

*a, b. Para.* From Mr. Stevens' collection.

## 12. FLATOIDES STIGMA, Mas et Fem.

*Ferrugineus; frons tricarinatus, transversè unicarinatus; epistoma fulrum, carinatum; prothorax carinatus; mesothorax quinque-carinatus; abdomen testaceum; pedes fulvi; alæ sat late; alæ anticae fuscae aut testaceae, macula trigona sublimpida ad costam ornata; fasciis obliquis fulvis et fuscis basi notata*

Body ferruginous: head as broad as the chest; crown surrounded by a rim, very slightly arched; its length not one-eighth of its breadth; front broad, rounded on each side, narrower near the epistoma, slightly concave at the junction, surrounded by a rim, having a middle ridge which is shortened towards the epistoma, and two side ridges which are slightly curved and united by a cross-ridge near the epistoma; the latter is tawny and lanceolate with a middle ridge: fore-chest with a middle ridge, slightly arched, about twice the length of the crown: middle-chest with five ridges; inner pair curved, united in front and behind, and inclosing a somewhat flat almost elliptical compartment; outer pair very short, not extending far from the fore border: abdomen testaceous, obconical, not longer than the chest: legs tawny: wings rather large; fore-wings brown, sometimes testaceous, with brown tips; a somewhat triangular, almost colourless spot on the fore border of the fore-wing; between it and the base is a row of very short oblique alternately brown and tawny bands: veins brown, pale on the spot; longitudinal veins very numerous; cross-veins not numerous; a few almost upright slightly curved cross-veins along the fore border which is slightly convex. Length of the body  $2\frac{1}{2}$  lines: of the wings 9 lines..

*a—d. ———?*

## 13. FLATOIDES STIPATUS, Fem.

*Ferrugineus; frons non carinatus; prothorax carinatus; mesothorax piceus, ejus carina semicirculum fingens; pedes ferrugini; alæ anticae fuscae, fulco guttatae, maculis duabus sublimpidis ad costam ornatae; alæ posticae fulvae, apice fuscae.*

Body ferruginous: head nearly as broad as the chest; crown surrounded by a rim, slightly concave on the hind border, almost straight in front; its length hardly one-eighth of its breadth; front broad, surrounded by a rim, not ridged, rounded on each side, rather narrower towards the epistoma, slightly concave where they join; its breadth less than twice its length; epistoma triangular, not ridged: fore-chest slightly arched, with a middle ridge, about twice the length of the crown: middle-chest pitehy, with a semicircular ridge, which proceeds from each side of the fore border into the disk: abdomen obconical, a little longer than the chest: legs ferruginous: fore-wings brown, adorned with numerous tawny dots, several of which are confluent in the disk; two larger almost colourless spots on the fore border, one beyond the middle, the other near the tip; veins blackish, pale on the spots; longitudinal veins very numerous; cross-veins few; fore border very convex towards the base, where there is a row of oblique parallel cross-veins: hind-wings tawny, brown towards the tips. Length of the body 3 lines; of the wings 9 lines.

a. New Holland. Presented by the Haslar Hospital.

## 14. FLATOIDES MESOCHLORUS, Fem.

*Fulvus; frons subcarinatus; epistoma non carinatum; mesothorax tricarinatus; abdomen flavum, subtus viride; pedes fulci; alæ anticae fuscae, disco virides, nigro-fusco decem-guttatae, guttis albis oblique fasciatae; alæ posticae fusco-cinereae, basi limpidae.*

Body tawny: head a little narrower than the chest; crown extremely short; front nearly flat, surrounded by a slight rim, having a very slight middle ridge, rounded on each side, hardly narrower towards the epistoma, straight at the junction with the latter; its length slightly exceeding its breadth; epistoma lanceolate, not ridged: fore-chest convex in front, slightly concave on the hind border: middle-chest about four times the length of the fore-chest, with three very slight ridges: abdomen pale yellow, green beneath, obconical, a little longer than the chest: legs pale tawny: wings of moderate breadth; fore-wings brown; disk pale green, with about ten blackish-brown dots; beyond them is a slightly oblique row of

smaller white dots; veins brown, green in the pale green part; longitudinal veins numerous towards the tips; cross-veins few; fore border dilated, along it a row of oblique parallel cross-veins: hind-wings pale brownish gray, colourless towards the base with the exception of the borders of the veins. Length of the body 3 lines; of the wings 9 lines.

#### 15. FLATOIDES CERVINUS, Mas.

*Fulvus; frons subcarinatus; epistoma trigonum, non carinatum; abdomen cervinum; pedes fulvi; alæ anticae cervinae, ad apices angustiores; alæ posticae subcinereae, ad venas obscuriores.*

Body tawny: head as broad as the chest; crown slightly arched; front flat, broad, surrounded by a rim, rounded on each side, much narrower towards the epistoma, with a very short middle ridge next the crown; epistoma triangular, not ridged: fore-chest slightly arched; its breadth full six times its length: middle-chest ridged?: abdomen obconical, fawn-colour, a little longer than the chest; upper and lower appendages large, much curved, crossing each other: legs pale tawny: wings of moderate breadth; fore-wings fawn-colour, narrower towards the tips; veins tawny: longitudinal veins numerous; cross-veins rather numerous; fore border dilated; along it a row of oblique cross-veins; hind-wings pale gray, darker along the borders of the veins. Length of the body 3 lines; of the wings 10 lines.

a. Jamaica. From Mr. Gosse's collection.

#### 16. FLATOIDES CONFORMIS, Mas.

*Fulvus; frons ellipticus, bifoveolatus; thorax non carinatus; abdomen stramineum, obconicum; pedes straminei; alæ anticae cervinae, sat angustae; alæ posticae subcinereae.*

Body tawny: head narrower than the chest, very convex in front; crown short, much arched; front elliptical, surrounded by a rim, with two slight furrows along the disk; epistoma triangular, not ridged; fore-chest concave on the hind border, very convex in front; middle-chest full twice the length of the fore-chest, not ridged: abdomen obconical, pale straw-colour, a little longer than the chest, its appendages short: legs pale straw-colour: fore-wings fawn-colour, rather narrow and slightly decreasing in breadth towards their tips; longitudinal veins rather numerous towards the tips; a row of parallel slightly oblique cross-veins along the fore

border: hind-wings pale gray. Length of the body  $2\frac{1}{2}$  lines; of the wings 9 lines.

a. Jamaica. From Mr. Gosse's collection.

# 17. FLATOIDES TENEBROSUS, Mas.

*Nigro-fuscus; frons ferrugineus, tricarinatus; prothorax carinatus; mesothorax tricarinatus; abdomen obconicum, thorace paullo longius, subtilis apice fulvum; pedes fulvi; alæ antice nigro-fuscae, latæ, fasciis albidis inter venas ornatae; alæ posticæ cinereæ.*

Body blackish-brown: head as broad as the chest; crown very short, very concave behind, slightly convex on the fore border, its length in the middle about half of its length on each side; front ferruginous, very much broader than long, rounded on each side, hardly narrower towards the epistoma, flat, surrounded by a rim, straight where it joins the epistoma, having three ridges, the middle one approaching the epistoma, the side pair shorter and slightly curved; epistoma ferruginous, triangular, not longer than broad: mouth tawny: fore-chest broadest in the middle, very convex in front, more slightly concave behind, with a middle ridge; its length about one-sixth of its breadth: middle-chest full five times the length of the fore-chest, with three ridges, the side pair diverging backward from the middle one and terminating on the oblique sides of the chest; abdomen obconical, a little longer than the chest, tawny beneath at the tip; appendages short; legs tawny: fore-wings blackish brown, rather broad, adorned with numerous little dingy white bands between the longitudinal veins and on some of the cross-veins: longitudinal veins very numerous; cross-veins few; fore border dilated, along it a row of oblique more or less parallel cross-veins; hind-wings gray, darker towards the tips; veins blackish. Length of the body  $2\frac{1}{2}$  lines; of the wings 9 lines.

a. Sierra Leone. Presented by the Rev. D. F. Morgan.

# 18. FLATOIDES LIGNARIUS, Mas et Fem.

*Ferrugineus; frons fulvus; prothorax bicarinatus; mesothorax piceus, non carinatus; abdomen obconicum; pedes fulvi; alæ antice ferrugineæ, sat latæ, maculis nonnullis nigro-fuscis; areolarum disci sublimpidi; alæ posticæ cinereæ, basi pallidiores.*

Body ferruginous: head a little narrower than the chest, crown almost united with the front, not arched, with a large pitchy spot on



each side, its breadth full twice its length; front tawny, flat, broad, rounded on each side, not narrower towards the epistoma, slightly concave where they join, surrounded by a slight rim, having a very short middle ridge adjoining the crown; its breadth much exceeding its length; epistoma tawny, lanceolate: fore-chest straight in front and behind, with a ridge on each side converging towards the fore border, its breadth about four times its length: middle-chest pitchy, not ridged: abdomen obconical, a little longer than the chest, raised into a cone near the base; sexual appendages very long, upper one armed above near the base with two spines, curved downward towards the tip which approaches the middle of the tip of the lower one, the latter is very deep, especially at the tip where its depth is almost equal to its length: legs tawny: fore-wings ferruginous, moderately broad, with a few variable darker spots; disks of the areolets almost colourless; veins brown; longitudinal veins not numerous; cross-veins rather numerous; fore border much dilated towards the base, along it a row of oblique parallel cross-veins; hind-wings gray, paler towards the base.

*Fem.* Abdomen shorter than the chest; tip rounded, along it is a groove which is ridged across.

Length of the body  $2\frac{1}{2}$  lines; of the wings 8 lines.

*a. — c.* Hong-Kong. Presented by J. C. Bowring, Esq.

#### 19. FLATOIDES FUMOSUS, Fem.

*Obscurè ferrugineus; frons subtricarinatus; mesothorax piccus, non carinatus; abdomen obconicum, thorace non longius; pedes ferruginei; alæ anticae latae, nigro-fuscae; alæ posticae fuscae.*

Body dark ferruginous: head as broad as the chest; crown very short, slightly arched, its length not one-eighth of its breadth; front ferruginous, flat, rounded on each side, a little narrower towards the epistoma, surrounded by a slight rim, having three indistinct ridges, concave where it joins the epistoma, which is triangular: fore-chest very short, slightly arched: middle-chest pitchy: abdomen obconical, not longer than the chest: legs ferruginous: fore-wings blackish brown; veins black; longitudinal veins rather numerous; cross-veins few; fore border widened, convex, along it a row of more or less oblique and parallel cross-veins; hind-wings brown. Length of the body  $1\frac{1}{2}$  line; of the wings 6 lines.

*a. — — — ?*

## 20. FLATOIDES BIFASCIA, Fem.

*Piceus, hirtus, latus; frons ferrugineus, carinatus; epistoma ferrugineum, lateribus piceum; mesothorax non carinatus; pectus et abdomen ferruginea; pedes fulvi; alæ anticæ nigrae, amplæ, albo bifasciatae, ad costam subferrugineae; alæ posticæ fusca fascia basique limpidis.*

Body pitchy, hairy, broad and short: head nearly as broad as the chest: crown straight, very short; front slightly tuberculate, rounded and ferruginous on each side, not surrounded by a rim, not narrower towards the epistoma, straight at the junction, with a slight middle ridge, its breadth very nearly twice its length; epistoma ferruginous, triangular, pitchy on each side: mouth tawny: fore-chest short, slightly arched: middle-chest not ridged: breast ferruginous: abdomen ferruginous, obconical, not longer than the chest: legs tawny: fore-wings black, very large, with two white bands: veins black, pale yellow on the bands; longitudinal veins not numerous; cross-veins rather numerous towards the base: fore border very convex, partly ferruginous, along it a row of parallel, slightly oblique cross-veins: hind-wings brown, colourless towards the base, and having near the tip a colourless band which is shortened towards the fore border. Length of the body  $1\frac{3}{4}$  line; of the wings 5 lines

*a.* Port Natal. From M. Guenzius' collection.

## 21. FLATOIDES MARGINATUS, Fem.

*Ferrugineus, granulatus; frons piceus, glaber, lateribus ferrugineis; mesothorax non carinatus; abdomen laeve; pedes fulvi; alæ anticæ latae, ferrugineae, apice obliquè truncatae, costa undulata; vitta sub costa fasciæque nonnulla fusca; venae longitudinales guttatae; alæ posticæ subfuscae.*

Body ferruginous, dull, finely granulated, broad, stout: head as broad as the chest; crown concave along the hind border, straight in front, its length on each side nearly twice that in the middle; front pitchy, flat, shining, tawny and slightly concave where it joins the epistoma, with a broad ferruginous border which is slightly impressed, rounded on each side, not narrower towards the epistoma; its breadth much exceeding its length; epistoma tawny, lanceolate: fore-chest slightly concave behind, more convex in front, much longer than the crown, its breadth near eight times its length: middle-chest flat, not ridged, full four times the length of the fore-chest; abdomen obconical, smooth, shining, a little longer than the

chest; segments towards the tip edged with black: legs tawny, rather broad; hind-shanks armed with two stout spines whose tips are black: fore-wings ample, ferruginous, obliquely truncated at the tips by the fore border, slightly undulating and having a brown band from thence to the hind border, brownish along the fore border and with two or three undulating brownish bands in the disk; veins ferruginous; longitudinal veins dotted, numerous towards the tips; cross-veins very numerous in the disk; fore border convex toward the base, slightly concave toward the tip, along it a row of more or less parallel and oblique cross-veins which are most numerous towards the tip: hind-wings pale brown, little more than half the length of the fore-wings; veins ferruginous. Length of the body 3 lines; of the wings 10 lines.

## 22. FLATOIDES RETRACTUS, Fem.

*Ferrugineus, granulatus; frons piceus, glaber; mesothorax non carinatus; pedes fulvi; alæ anticae latae, ferrugineae, fusco variae, oblique truncatae, albo fasciatae; alæ posticae subfuscae.*

Body ferruginous, dull, finely granulated, broad, stout: head as broad as the chest; crown concave along the hind border, straight in front, its length on each side nearly twice that in the middle; front pitchy, flat, shining, slightly emarginate where it joins the epistoma, with a broad border which is slightly impressed, rounded on each side, not narrower towards the epistoma, its breadth much exceeding its length; epistoma ferruginous, lanceolate: mouth tawny: fore-chest slightly concave behind, more convex in front, much longer than the crown, its breadth near eight times its length: middle-chest flat, not ridged, full four times the length of the fore-chest: abdomen obconical, smooth, shining, a little longer than the chest: legs tawny, rather broad; hind-shanks armed with two stout spines whose tips are black: fore-wings ample, ferruginous, mottled with brown, obliquely truncated at the tips by the fore border, slightly undulating and with a brown band from thence to the hind border, adorned with an elliptical short white band in the disk; veins darker or paler according to the colour of the wing; longitudinal veins numerous; cross-veins few; fore border very slightly undulating, along it a row of parallel cross-veins which are much more numerous and more oblique near the tip than towards the base: hind-wings pale brown; veins darker. Length of the body 3 lines; of the wings 10 lines.

*a.* Sierra Leone. Presented by the Rev. D. F. Morgan.

## 23. FLATOIDES ORIENTIS, Mas.

*Fulvus; frons subcarinatus; prothorax carinatus; mesothorax tricarinatus; pedes fulvi; alæ anticae testaceae, maculis limpidis ornatae; alæ posticae cineræ.*

Body tawny: head as broad as the chest; crown short, bordered by a very slight rim, concave behind, straight on the fore border, its length in the middle half of that on each side; front flat, rounded on each side, a little narrower towards the epistoma, bordered by a very slight rim, concave where it joins the epistoma, with a very indistinct ridge, its breadth less than twice its length; epistoma triangular, not ridged: fore-chest more than twice the length of the crown, concave on the hind border, more convex in front, with a middle ridge: middle-chest with three ridges, the side pair slightly undulating, diverging much from the fore border: abdomen obconical, a little longer than the chest: legs tawny: fore-wings broad, testaceous, colourless at intervals along the tips; a colourless dot near the tip of the fore border, and a large oblong colourless spot in the disk touching the fore border; veins tawny, pale yellow in the colourless part; longitudinal veins very numerous; cross-veins rather numerous in the disk; fore border convex, along it a row of parallel oblique cross-veins decreasing in length towards the tip: hind-wings gray. Length of the body  $2\frac{1}{2}$  lines; of the wings  $7\frac{1}{2}$  lines.

a. East India.

## 24. FLATOIDES MINOR, Mas.

*Ferrugineus; vertex carinatus, piceo binaculatus; frontis carina furcata; thorax non carinatus; mesothoracis discus piceus; pedes fulvi; alæ anticae latæ, ferrugineæ; alæ posticae cineræ.*

Body ferruginous: head as broad as the chest; crown slightly depressed, surrounded by a slight rim, having a slight middle ridge and on each side a pitchy spot, its length about half its breadth; front broader than long, rounded and with a slight rim on each side, concave where it joins the epistoma, having a slight middle ridge which is forked towards the crown; epistoma lanceolate: fore-chest as long as the crown, slightly concave behind, truncate on the fore border: disk of the middle-chest pitchy: abdomen obconical, a little longer than the chest; appendages very large; upper one with a groove, near whose base is a little appendage, curved downward and meeting the lower one, the latter is very deep towards the tip: legs tawny: fore-wings broad, ferruginous; veins ferruginous; longitu-

dinal veins not numerous; cross-veins rather numerous in the disk; fore border widened, along it a row of slightly oblique nearly parallel cross-veins: hind border widened and tuberculate near the base: hind-wings dark gray; veins black. Length of the body  $2\frac{1}{2}$  lines; of the wings 7 lines.

a. China.

## 25. FLATOIDES DECORUS, Mas.

*Fulvus; vertex tricarinatus; frons flava, fulvo bicarinata: prothorax et mesothorax tricarinati, hujus discus niger; metathorax flavus; pectus albidum; abdomen basi viride, supra fusco varium; pedes virides; tarsi fulvi; alæ anticae fuscae, fulvo variae; macula ad costam magna trigona limpida; alæ posticae fuscae basi limpidae.*

Body tawny: head much narrower than the chest; crown much longer than broad, with three ridges which are partly brown; an oblique brown stripe on each side of the low middle ridge; the high side ridges united and forming an angle in front; front pale yellow, very slightly increasing in breadth till near the epistoma where it is rounded and much dilated; its two tawny ridges are connected by a single ridge with the side ridges of the crown, and thence slightly diverge to the epistoma, which is pale yellow and lanceolate: fore-chest shorter than the crown; its breadth more than four times its length; the middle of its disk occupied by three ridges which are united in front and include a brown divided conical compartment: middle-chest more than twice the length of the fore-chest, with three ridges; the side ridges diverging much towards the hind border; disk black: hind-chest yellow; breast whitish: abdomen obconical, not longer than the chest, partly brown above, green at the base: legs pale green; feet tawny; hind-shanks armed beneath with two spines: fore-wings brown, varied with tawny, and having in the middle a very large triangular colourless spot which rests on the fore border, and occupies about one-fourth of the surface; veins pale yellow, very numerous towards the tips; a row of short oblique parallel cross-veins along the fore border: hind-wings brown, colourless towards the base; veins blackish. Length of the body 2 lines; of the wings 8 lines.

a. ———?

## 26. FLATOIDES TRUNCATUS, Mas.

*Fulvus; frons carinatus; mesothorax ferrugineus; abdomen luteum; pedes fulvi; alæ anticæ subfulvæ, apice truncatæ; alæ posticæ sublimpidæ, apice fuscæ.*

Body tawny, darker here and there: head a little narrower than the chest; crown conical, slightly concave; front much longer than broad, widening from the crown to the epistoma where it is rounded, surrounded by a rim, and having a slight middle ridge: epistoma lanceolate: eyes striped: fore-chest convex in front, slightly concave behind; its breadth nearly four times its length: middle-chest ferruginous, more than twice the length of the fore-chest: abdomen luteous, obconical, not longer than the chest: sexual apparatus consisting of two curved appendages whose tips cross each other; the lower one compressed, deep, grooved; the upper one longer and more slender: legs tawny: fore-wings truncate at the tips, pale tawny: veins darker, very numerous towards the tips; a row of very short oblique parallel cross-veins along the fore border: hind-wings almost colourless, brown towards the tips; veins brown, tawny at the base. Length of the body  $2\frac{1}{2}$  lines; of the wings 7 lines.

a. North India. From Mr. Warwick's collection.

## 27. FLATOIDES BASALIS, Mas.

*Testaceus, sat latus; frons non carinatus; thorax ferrugineus; abdomen luteum; pedes fulvi; alæ anticæ subfulvæ, basi picco-irrimaculatæ; alæ posticæ subcinereæ.*

Body testaceous, rather broad: head as broad as the chest: crown extremely short, channelled across, its breadth more than eight times its length; front flat, smooth, nearly square, not ridged: epistoma triangular: chest ferruginous: fore-chest arched, more than twice the length of the crown; its breadth more than four times its length: middle-chest much more than twice the length of the fore-chest: abdomen obconical, luteous, not longer than the chest: the lateral plates at the tip with black edges; lower middle appendage serrated: legs tawny: fore-wings pale tawny; three pitchy spots near the base of each; veins tawny, very numerous; a row of rather long slightly oblique parallel cross-veins along the fore border: hind-wings pale gray; veins brown. Length of the body  $1\frac{3}{4}$  lines; of the wings 6 lines.

a. ———? From Mr. Birch's collection.

## 28. FLATOIDES QUADRATUS, Mas.

*Fulvus; vertex carinatus, margine postico elevato; frons pallidiorè varius, carinatus; epistoma vitta fasciisque obliquis pallidis; prothorax fusco guttatus; mesothorax non carinatus, apice niger; metathorax et pectus albida; abdomen apice albidum; pedes fulvi; alæ anticæ amplæ, albide, fulco variæ, apice obliquè truncatæ, fusco guttatæ, margine postico apicem versus fusco maculatæ; alæ posticæ albide, iridescentes.*

Body tawny: head a little narrower than the chest; crown extremely short and apparently united to the front, having a middle ridge and along the hind border a cross ridge; front mottled with paler colour, flat, having a slight rim along each side where it is hardly rounded, straight where it joins the epistoma, with a slight middle ridge which is continued from the crown, and disappears in the disk; epistoma lanceolate, with a pale middle stripe, from whence oblique bands recede to each side: fore-chest concave along the hind border, more convex in front, adorned with numerous brown dots: middle-chest flat on the disk of the hind part, not keeled; tip black: hind-chest and breast whitish: abdomen obconical, a little longer than the chest; plates at the tip whitish: legs pale tawny: wings ample: fore-wings dingy white, partly tawny, truncate at the tips or having an inward curve towards the hind border, adorned with numerous little brown dots which are mostly towards the fore border, and with a brown spot which is near the tip of the hind border; veins whitish, darker when the wings are so; longitudinal veins very numerous; cross-veins numerous in the disk; fore border hardly convex, along it a row of stout slightly oblique parallel cross-veins: hind-wings whitish, iridescent; veins pale tawny. Length of the body 3 lines; of the wings 12 lines.

a. Venezuela. From Mr. Dyson's collection.

## 29. FLATOIDES CIXII, Fem.

*Niger; frons fulvus, tricarinatus, nigro fasciatus et maculatus; prothorax fulco varius; mesothorax ferrugineo varius, bicarinatus, ad apicem cristatus; abdomen basi subtus fulvum; pedes fulvi; alæ anticæ fusce, apice et ad costam limpide fasciis guttisq. fuscis; alæ posticæ limpide.*

Body black: head a little narrower than the chest; crown very short, surrounded by a rim; front tawny, with a broad black band next the crown and a few small black spots towards the epistoma,

rounded on each side, straight where it joins the epistoma, surrounded by a slight rim and having three ridges, the side pair slightly curved and disappearing in the disk, its breadth less than twice its length; epistoma tawny, triangular, pitchy on each side: mouth tawny with a black tip: fore-chest arched, partly tawny, more than twice the length of the crown: middle-chest partly ferruginous and with an oblique ridge on each side, having a high crest towards the hind border: abdomen obconical, as long as the chest, tawny beneath towards the base: legs tawny: fore-wings brown, colourless with four interruptions along the fore border and at the tips, where there are numerous irregular brown dots; veins ferruginous, tawny in the colourless parts; longitudinal veins very numerous towards the tips; cross-veins few; along the fore border a row of long mostly parallel cross-veins which are more oblique towards the tips than elsewhere: hind-wings colourless. Length of the body  $3\frac{1}{2}$  lines; of the wings 12 lines.

*a.* Port Natal. From M. Gueinzus' collection.

### 30. FLATOIDES RUDIS? Mas.

*Ricania rudis*, Schaum.?

*Cicada rudis*, Stoll, *Cic.* 81, pl. 21, f. 113.?

*Fuscus*; *caput striatum*; *frons carinatus*; *prothorax fulvus, carinatus, fusco maculatus*; *mesothorax tricarinatus, apice flavus*; *metathorax et pectus ferruginea*, *abdomen ferrugineo varium*; *pedes fulvi*; *ala antica angustiores, fusca, ad costam nigra*; *ala postica cinerea, apice fusca*.

Body brown: head as broad as the chest; crown finely striated; very concave behind, slightly convex in front, its length in the middle about half of that on each side; front very much longer than broad, surrounded by a slight rim, rounded and rather broader on each side towards the epistoma, to which it is closely joined by a very slightly concave suture, obliquely and very finely striated on each side of the very distinct middle ridge which is continued along the epistoma: the latter is lanceolate: fore-chest conical in front, slightly concave on the hind border, tawny with brown spots having a slightly raised tawny middle stripe, its length on each side about one-third of that in the middle: middle-chest having a slightly raised tawny middle stripe, and on each side a slightly undulating ridge: tip yellow: hind-chest and breast ferruginous: abdomen obconical, partly ferruginous, a little longer than the chest; appendages at the tip black: legs tawny: fore-wings narrow, brown, paler in the disk and about



the cross-veins, black along the fore border; veins ferruginous; cross-veins ramified in the disk; longitudinal veins and cross-veins regular and very numerous towards the tips; fore border convex, along it a row of oblique very short nearly parallel cross-veins: hind-wings pale gray, brown towards the tips; veins black; a few very short cross-veins towards the tip of the fore border. Length of the body 3 lines; of the wings 12 lines.

a. Venezuela. From Mr. Dyson's collection.

#### Genus 4. RICANIA.

Ricania, *Germ. Mag. Ent.* iii. 221.

Flata, *Fabr., Germar, Boisduval.*

Cicada, *Fabr., Donovan.*

Cixius, *Guérin* (ad partem).

##### 1. RICANIA RETICULATA.

Ricania reticulata, *Burm. Handb. Ent.* ii. 1, 161, 1. *Spin. Ann.*

*Soc. Ent. Fr.* viii. 403, 8. *Blanch. Hist. Nat. Ins.* iii. 173, 1.

*Hém.* pl. 13, f. 4. *Amyot et Serv. Hist. Nat. Hém.* 529, 1.

Flata reticulata, *Fabr. Syst. Rhyn.* 47, 12. *Stoll, Cic.* 29, pl. 4, f.

19. *Germ. Thon, Arch.* ii. 2, 49, 40.

a. Honduras. From Mr. Dyson's collection.

b. ——— ?

##### 2. RICANIA PLANIPENNIS.

Ricania planipennis, *Spin. Ann. Soc. Ent. Fr.* viii. 396, 2.

Africa.

##### 3. RICANIA HYALINATA.

Ricania hyalinata, *Guér. Voy. Belanger, Zool.* 466.

Cicada hyalinata, *Donovan.*

Ricania Donovanii, *Spin. Ann. Soc. Ent. Fr.* viii. 397, 3.

Offak.

##### 4. RICANIA PÆCILOPTEROIDES.

Ricania pæciliopteroïdes, *Spin. Ann. Soc. Ent. Fr.* viii. 398, 4, pl. 6,  
f. 6.

Brazil.

## 5. RICANIA PELLUCIDA.

*Ricania pellucida*, *Spin. Ann. Soc. Ent. Fr.* viii. 401, 6.

*Cixius pellucidus*, *Guér. Voy. Coquille, Zool.* 189.

Java.

## 6. RICANIA PANORPÆFORMIS.

*Ricania panorpæpennis*, *Spin. Ann. Soc. Ent. Fr.* viii. 402, 7

*Cixius panorpæpennis*, *Guér. Voy. Coquille, Zool.* 190.

Port Jackson.

*a—d.* Van Diemen's Land. From Dr. Hooker's collection.

*e.* ———? From Mr. Shuckard's collection.

*f—h.* ———?

## 7. RICANIA SERVILLEI.

*Ricania Servillei*, *Spin. Ann. Soc. Ent. Fr.* viii. 404, 9.

Isle of France.

## 8. RICANIA OCLATA.

*Ricania oculata*, *Guér. Voy. Coquille, Ins.* 192, pl. 10, f. 9. *Spin.*

*Ann. Soc. Ent. Fr.* viii. 407, 11.

Flata 10, *Boisd. Voy. Astrolabe*, p. 10, f. 14.

New Guinea.

## 9. RICANIA KLUGII.

*Ricania Klugii*, *Spin. Ann. Soc. Ent. Fr.* viii. 408, 12.

*a, b.* Para. From Mr. Stevens' collection.

## 10. RICANIA TRIMACULATA.

*Ricania trimaculata*, *Guér. Voy. Coquille, Ins.* pl. 9, 190.

New Guinea.

## 11. RICANIA CROCEA.

*Ricania crocea*, *Guér. Icon. Règne Anim. Texte*, 359.

Madagascar.

## 12. RICANIA NEBULOSA.

Flata nebulosa, *Fabr. Syst. Rhyn.* 51, 25.

Cicada nebulosa, *Fabr. Ent. Syst.* iv. 40, 58.

Equatorial Africa.

## 13. RICANIA PALLIDIPENNIS.

Cixius pallidipennis, *Guér. Voy. Coquille*, 182.

Port Jackson.

## 14. RICANIA CYANESCENS.

Ricania cyanescens, *Le Guillon, Rev. Zool.* 1841.

## 15. RICANIA ALBIZONA.

Ricania albizona, *Germ. Cat. Dregé, No.* 1661. *Spin. Ann. Soc. Ent. Fr.* viii. 395, 1.

Cape.

## 16. RICANIA? VITRATA.

Flata vitrata, *Fabr. Syst. Rhyn.* 48, 13.

South America.

## 17. RICANIA? PLANICEPS.

Flata planiceps, *Fabr. Syst. Rhyn.* 48, 14.

South America.

## 18. RICANIA? DIAPHANA.

Flata diaphana, *Fabr. Syst. Rhyn.* 48, 15.

South America.

## 19. RICANIA HEMEROBII, Mas et Fem.

*Fulva* ; *frons tricarinatus, fusco maculatus* ; *epistoma carinatum* ; *mesothorax ferrugineus, fulvo vittatus, nigro bicarinatus* ; *abdomen nigro vittatum* ; *pedes fulvi, nigro vittati* ; *alæ sublimpidæ* ; *alæ anticae late, apice fusce, fusco quinquemaculatæ* ; *alæ posticæ fusco marginatæ*.

Body tawny : head narrower than the chest ; crown very concave on the hind border, hardly convex in front, surrounded by a rim, its length in the middle about half of that on each side ; front prominent, forming a right angle on each side, rounded and slightly widened towards the epistoma, straight where it joins the epistoma, dotted with brown, bordered by a black-edged rim which is deepest towards the epistoma, having three ridges ; the side pair converging, extending beyond the middle one, and united on the fore border ; its length about twice its breadth ; epistoma lanceolate, with a black border and a black middle ridge : fore-chest long on the middle, very short on each side, very slightly concave on the hind border, conical in front and apparently advancing over the crown : middle chest ferruginous with a tawny middle stripe and two black oblique and slightly undulating ridges : abdomen obconical, longer than the chest, with a black stripe above : legs tawny, slender, striped with black : wings nearly colourless ; fore-wings ample, pale brown at the tips, with two brown spots near the tips towards the hind border, one on the fore border near the tip, and two by the brand which is tawny ; veins black, forming many arcolets of various forms in the disk, forked at the tips ; along the fore border a row of parallel cross-veins which are most numerous and most oblique towards the tips : hind-wings edged with brown.

Length of the body 4 lines ; of the wings 13 lines.

*a, b.* Ceylon. Presented by Dr. J. Hooker

## Genus 5. POCHAZIA.

*Pochazia, Amyot et Serv. Hist. Nat. Hém.* 528, 419.

*Cicada, Fabr.*

*Flata, Fabr.*

*Ricania, Guérin, Spinola.*

*Pæcilopectera, Westwood.*

1. *POCHAZIA FASCIATA.*

*Pochazia fasciata*, *Amyot et Serv. Hist. Nat. Hém.* 528, 1.

*Flava fasciata*, *Fabr. Syst. Rhyn.* 47, 8.

*Ricania fasciata*, *Spin. Ann. Soc. Ent. Fr.* viii. 410, 14.

Java.

2. *POCHAZIA FUMATA.*

*Pochazia fumata*, *Amyot et Serv. Hist. Nat. Hém.* 529, 2.

*Cicada fuscata*? *Fabr. Ent. Syst.* iv. 28, 4.

*Flata fuscata*? *Fabr. Ent. Syst. Suppl.* 517, 4. *Syst. Rhyn.* 47, 9.

Java.

3. *POCHAZIA SPLENDIDA.*

*Ricania splendida*, *Guér. Voy. Coquille, Ins.* 191, pl. 10, f. 10. *Spin. Ann. Soc. Ent. Fr.* viii. 406, 10.

*Flata splendida*, *Fabr. Syst. Rhyn.* 50, 21.

New Guinea.

4. *POCHAZIA OBSCURA*?

*Ricania obscura*, *Guér. Voy. Belang.* 466, pl. iii. f. 6. (*Euryptera obscura*).

*Pœcilopectera antica*, *Westw. Griff. Anim. Kingd. Ins.* ii. 260, pl. 90, f. 4. pl. 138, f. 4.

*Flata obscura*? *Fabr. Syst. Rhyn.* 49, 16.

East Indies.

5. *POCHAZIA IODIPENNIS.*

*Pœcilopectera iodipennis*, *Spin. Ann. Soc. Ent. Fr.* viii. 428, 5.

*Ricania iodipennis*, *Guér. Voy. Coquille*, 191.

New Guinea.

6. *POCHAZIA TRIANGULI*, MRS.

*Nigra*; *frons striatus, tricarinatus*; *epistoma ferrugineum, carinatum*; *prothorax impressus, carinatus, ferrugineo marginatus*; *mesothorax quinquecarinatus, lateribus ferrugineis*; *abdomen ferrugineum*; *pedes ferruginei*; *alæ anticae nigro-fuscae, magnæ, ad costam albo maculatæ*; *alæ posticæ fuscae*.

Body black: head very short, as broad as the chest; crown bordered by a rim, concave on the hind border, slightly undulating

in front, its length in the middle not half of that on each side; front finely striated, rounded on each side, rather narrower towards the epistoma, bordered by a rim, slightly concave where it joins the epistoma, having three ridges, the side pair indistinct, its breadth nearly twice its length; epistoma ferruginous, triangular, with a middle ridge: fore-chest ferruginous before and behind, very slightly concave behind, convex on the fore border, with a middle ridge on each side of which is an impression, its length in the middle rather less than twice that on each side: middle-chest very finely striated, ferruginous on each side, having five ridges, the two on each side united in the disk: abdomen ferruginous, obconical, a little longer than the chest; upper appendage short; lower one much longer, very deep at the tip: legs ferruginous: fore-wings dark brown, very ample, triangular, with a colourless edge from the hind border till near the tip; a triangular white spot on the fore border a little beyond the middle; veins pitchy, pale yellow on the white spot; longitudinal veins very numerous; cross-veins few; fore border straight, along it a row of mostly parallel cross-veins which are most numerous and most oblique towards the tips: hind-wings brown, not more than half the length of the fore-wings. Length of the body  $3\frac{1}{2}$  lines; of the wings 15 lines.

a, b. Congo. Presented by Sir J. Richardson.

#### 7. POCHAZIA GUTTIFERA, Mas et Fem.

*Nigra; frons striatus, ferrugineus, carinatus, nigro marginatus; prothorax carinatus; mesothorax quinquecarinatus; abdomen basi ferrugineum; pedes ferruginei; alae nigro-fuscae; alae anticae magnae, maculis tribus guttaque una limpidis ornatae.*

Body black: head very short, as broad as the chest; crown bordered by a rim, concave on the hind border, straight in front, its length in the middle about half of that on each side; front dark ferruginous with a black border, very finely striated, rounded on each side, narrower towards the epistoma, bordered by a rim, hardly concave where it joins the epistoma, having a middle ridge which does not reach the fore border, its breadth nearly twice its length; epistoma triangular, with a middle ridge: fore-chest slightly concave behind, more convex on the fore border, with a middle ridge, much longer in the middle than on each side: middle-chest with five ridges, the two on each side united in the disk: abdomen obconical, a little longer than the chest, ferruginous towards the base: legs ferruginous: fore-wings triangular, ample, dark brown, blackish along the fore border, with three colourless spots, one on the fore

border beyond the middle, one near the tip, and one which is smaller, near the hind border; a white dot on the disk, and between it and the tip a small indistinct tawny spot; veins blackish, tawny on the colourless spots; longitudinal veins very numerous towards the tips; cross-veins few; fore border straight, along it a row of oblique, mostly parallel cross-veins which are shorter towards the tip: hind-wings dark brown, little more than half the length of the fore-wings. Length of the body  $3\frac{1}{2}$ —4 lines; of the wings 14—17 lines.

a—c. Silhet. From the Rev. J. Stainforth's collection.

### 8. POCHAZIA INTERRUPTA, Fem.

*Nigra; frons striata, tricarinata, ferrugineo marginata; epistoma ferrugineum, carinatum; prothoracæ carinatus; mesothoracæ quinquecarinatus; abdomen ferrugineum; pedes ferruginei; alæ albo interruptè fasciatæ; alæ anticæ nigro-fuscae, magnæ; alæ posticæ fuscae.*

Body black: head very short, as broad as the chest; crown very short, dark ferruginous, bordered by a rim, concave on the hind border, nearly straight in front, its length in the middle about half of that on each side; front very finely striated, rounded on each side, rather narrower towards the epistoma, bordered by a ferruginous rim, slightly concave where it joins the epistoma, having three ridges, the side pair indistinct, its breadth a little less than twice its length; epistoma ferruginous, triangular, with a slight middle ridge: fore-chest very slightly concave behind, convex on the fore border, with a middle ridge, on each side of which is an impression, its length in the middle less than twice that on each side: middle-chest very finely striated with five ridges, the two on each side united in the disk: abdomen dark ferruginous, obconical, a little longer than the chest: legs ferruginous: fore-wings dark brown, ample, triangular, with a broad, oblique white band which is interrupted in front; a row of white dots extending on the edge of the wing from the hind border along one-third of the distance to the tip; veins blackish, pale yellow on the white parts; longitudinal veins very numerous; cross-veins few; fore border straight, along it a row of mostly parallel cross-veins which are more oblique where the longitudinal vein appears contorted, beyond this they are shorter: hind-wings brown, little more than half the length of the fore-wings, with a white band which forms one with that of the fore-wing. Length of the body 3 lines; of the wings 12 lines.

a. ———? From Mr. Children's collection.

b. Malabar. From Mr. Walker's collection.

9. *POCHAZIA OBLIQUA*, Mas.

*Nigra; frons ferruginea, carinata; prothorax carinatus; mesothorax quinquecarinatus; pedes ferruginei; alæ anticae magne, fuscae, basi ferrugineae, fulvo bifasciatae et unimaculate; alæ posticae subfulvae.*

Body black: head very short, as broad as the chest; crown very short, bordered by a rim, slightly arched, shorter in the middle than on each side: front dark ferruginous, rounded on each side, narrower towards the epistoma, bordered by a rim, slightly concave where it joins the epistoma, with a slight middle ridge, its breadth rather less than twice its length; epistoma triangular, not ridged: fore-chest arched, with a middle ridge, more than twice the length of the crown: middle-chest with five ridges; the inner pair diverging from the fore border and united near the hind border to the outer pair which are short: abdomen oboconical, a little longer than the chest: legs ferruginous: fore-wings ample, nearly triangular, brown, ferruginous towards the base with the exception of the fore border, adorned with two slightly tawny bands, the outer one of irregular breadth, the inner one shorter and broader, between them on the fore border is a slightly tawny nearly triangular spot; veins varying according to the colour of the wing; longitudinal veins very numerous; cross-veins few; fore border very slightly convex, along it a row of parallel cross-veins which are more oblique where the longitudinal vein appears contorted: hind-wings very slightly tinged with tawny, brown along the fore borders. Length of the body 3—3½ lines; of the wings 9—10 lines.

*a, b. ——— ?*

10. *POCHAZIA OCELLUS*, Mas et Fem.

*Picea; frons striata, carinata, ferrugineo marginata; epistoma fulvum, subcarinatum; prothorax carinatus; mesothorax transversè striatus, quinquecarinatus; abdomen basi subitusque ferrugineum; pedes fulvi; alæ limpidae, fusco marginatae; alæ anticae latae, fusco bifasciatae; fascia 1a ocellum fingens.*

Body pitchy: head as broad as the chest; crown very short, bordered by a ferruginous rim, concave on the hind border, nearly straight in front, its length in the middle about half of that on each side; front very finely striated, rounded on each side, a little narrower towards the epistoma, bordered by a ferruginous rim, slightly concave where it joins the epistoma, with three ridges, the side pair



indistinct, its breadth nearly twice its length; epistoma and mouth tawny, the former indistinctly ridged: fore-chest arched, with a middle ridge, full twice the length of the crown, longer in the middle than on each side: middle-chest finely striated across, with five ridges, the inner pair diverging from the fore border and united to the outer pair in the disk: abdomen obconical, a little longer than the chest, ferruginous at the base and beneath: legs tawny: wings colourless, with brown borders; fore-wings ample; a brown dot near the base, beyond it two slender brown bands; the first forming a brown ringlet in the disk, between which and the fore border it is widened and includes a colourless dot; the second very slight, extending along the outer band of cross-veins; veins tawny, here and there brown; longitudinal veins numerous; cross-veins few: fore border very slightly convex, along it a row of parallel cross-veins which are more oblique where the longitudinal vein appears contorted; brand tawny. Length of the body  $2\frac{1}{2}$ —3 lines; of the wings 8—9 lines.

*a, b.* China. Presented by G. T. Lay, Esq.

## II. POCHAZIA AUSTRALIS, Fem.

*Ferruginea; frons testacea, tricarinata; prothorax carinatus; mesothorax tricarinatus; pedes testacei; alae anticae subfulvae, ad costam testaceae, fusco marginatae et bifasciatae; alae posticae limpidae, fusco marginatae.*

Body ferruginous: head as broad as the chest; crown very short, bordered by a rim, concave behind, very slightly convex in front and consequently much shorter in the middle than on each side; front testaceous, rounded on each side, very little narrower towards the epistoma, without a rim, slightly concave where it joins the epistoma, with three ridges, the side pair curved, its breadth nearly twice its length; epistoma testaceous, triangular, not ridged: fore-chest more than twice the length of the crown, with a tawny middle ridge, hind border concave in the middle, convex on either side, fore border the reverse, its middle curve exceeding that of the hind border: middle-chest with three ridges, the side pair slightly undulating: abdomen obconical, a little longer than the chest; the three processes above and the lateral plates tipped with black: legs testaceous: fore-wings ample, with a very slightly tawny tinge, testaceous along the fore border for near half the length from the base, brown mottled with tawny behind the testaceous hue and along the fore border beyond and along the tip, a colourless spot on the brown of the fore border, two or three very irregular and imperfect brown bands on the disk; veins tawny; longitudinal veins numerous;

cross-veins few; fore border very slightly convex, along it a row of parallel cross-veins which are most oblique towards the tip: hind-wings colourless, edged with brown; veins black, tawny towards the base. Length of the body  $2\frac{1}{2}$  lines; of the wings 9 lines.

a. New Holland. From Mr. Lambert's collection.

b. New Holland.

### 12. POCHAZIA SIMULANS, Fem.

*Ferruginea, non carinata; mesothorax niger; metathorax fulvus; abdomen basi fulvum; pedes fulvi; alae anticae fuscae, fasciis duabus limpidis ornatae, ad costam fulvo maculatae; alae posticae cinereo-fuscae.*

Body ferruginous: head as broad as the chest; crown very short, concave behind, very slightly convex in front, shorter in the middle than on each side; front flat, rounded on each side, narrower towards the epistoma, bordered by a rim, concave where it joins the epistoma, not ridged, its breadth very nearly twice its length; epistoma triangular: fore-chest very short, arched, bordered by a rim: middle-chest black, not ridged: hind-chest tawny: abdomen obconical, tawny at the base, hardly longer than the chest: legs tawny: fore-wings brown, ample; a tawny triangular spot on the fore border beyond the middle; two broad oblique, very irregular colourless bands in the disk, the first short, the second interrupted: veins tawny; longitudinal veins numerous; cross-veins few; fore border very slightly convex: along it a row of parallel cross-veins which are contorted and more oblique towards the tip: hind-wings pale grayish brown. Length of the body  $2\frac{1}{2}$  lines; of the wings 8 lines.

a. North India. From Mr. Warwick's collection.

### 13. POCHAZIA APICALIS, Fem.

*Testacea; frons tricarinata; mesothorax niger, quinquecarinatus; pedes testacei; alae anticae cerrinae, fusco bifasciatae, apice nigro guttatae; alae posticae subcinerae, margine postico subfuscae.*

Body testaceous: head as broad as the chest; crown very short, slightly arched, bordered by a rim, of equal length across its whole breadth; front flat, rounded on each side, narrower towards the epistoma, bordered by a rim, hardly concave where it joins the epistoma, with three slight ridges, the side pair slightly curved, its breadth a little less than twice its length: fore-chest very short, arched, with-

out a rim: middle-chest black, with five ridges, the two on each side slightly undulating: abdomen obconical, very little shorter than the chest: legs testaceous: fore-wings dull fawn-colour, ample, finely pubescent, with two indistinct pale brown oblique bands, the first forming a ringlet; a black dot by the tip of the fore border; veins tawny; longitudinal veins very numerous; cross-veins few; fore border slightly convex, along it a row of parallel cross-veins which are contorted and more oblique near the tip, where the longitudinal vein approaches the fore border: hind-wings pale gray, pale brown along the hind border. Length of the body  $2\frac{1}{2}$  lines; of the wings 8 lines.

#### 14. POCHAZIA DUBIA, Fem.

*Fulva; mesothorax quinquecarinatus; pedes fulvi; alæ anticæ flavo-fuscae, maculis quatuor limpidis ornate, ad costam nigro-fusco bimaculate, basi nigro guttate; alæ posticæ subcinereæ, fusco marginatæ.*

Body tawny: head wanting: fore-chest very short: middle-chest with five ridges, the inner pair diverging from the fore border: abdomen obconical, a little longer than the chest: legs tawny: fore-wings yellowish-brown, pubescent, of moderate size; a black dot on the disk near the base; two blackish-brown spots on the fore border, one a little before the middle, the other near the tip; four colourless spots; first large, nearly triangular, on the fore border; second larger, interrupted, behind the first, touching the hind border; third smaller, near the base; fourth much smaller, on the tip of the fore border; veins tawny; longitudinal veins very numerous; cross-veins few, forming two bands; fore border slightly convex, along it a row of parallel cross-veins which are longer and more oblique towards the tip: hind-wings very pale gray, with brown borders; veins brown. Length of the body  $2\frac{1}{2}$  lines; of the wings 7 lines.

a. Mozambique. From Mr. Argent's collection.

#### 15. POCHAZIA REMOTA, Mas.

*Ferruginea; frons testacea, tricarinata; prothorax testaceus, carinatus; mesothorax quinquecarinatus; pedes fulvi; alæ anticæ fuscae, basi ferrugineæ, ad discum fulvo trimaculate, costa maculis una limpida duabusque nigro-fuscis ornate, basi nigro guttate; alæ posticæ subcinereæ, fusco marginatæ.*

Body ferruginous: head as broad as the chest; crown very short, bordered by a rim, much arched; front testaceous, shining,

much rounded on each side, a little narrower towards the epistoma, bordered by a slight rim, almost straight where it joins the epistoma, with three ridges, the side pair curved, its breadth rather less than than twice its length; epistoma triangular, black along each side, not ridged; an oval plate on each side of the front, and a narrower one on each side of the epistoma: fore-chest testaceous, short, bordered by a rim, with a middle ridge, concave on the hind border, more convex in front: middle-chest with five ridges, the two on each side straight, parallel, the outer one short: abdomen obconical, very little longer than the chest: legs tawny: fore-wings brown, of moderate size, ferrugineous towards the base; a large triangular colourless spot beyond the middle of the fore border with a blackish-brown spot on each side of it; two or three irregular and almost united pale tawny spots in the disk and one nearer the base, near the latter a black dot; veins tawny, green on the colourless spot; longitudinal veins very numerous; cross-veins very few: fore border slightly convex, along it a row of parallel cross-veins which are longer and more oblique towards the tip: hind-wings pale gray with dark brown borders; veins black, ferruginous towards the base. Length of the body 3 lines; of the wings 7 lines.

a. Brazil. Presented by John Miers, Esq.

#### Genus 6. NEPHESA.

*Nephesa*, *Amyot et Serv. Hist. Nat. Hém.* 527, 418.  
*Ricania*, *Spinola*.

##### 1. NEPHESA ROSEA.

*Nephesa rosea*, *Amyot et Serv. Hist. Nat. Hém.* 528, 1.  
*Ricania rosea*, *Spin. Ann. Soc. Ent. Fr.* viii. 400, 5.

Java.

#### Genus 7. DALAPAX.

*Dalapax*, *Amyot et Serv. Hist. Nat. Hém.* 521, 409.  
*Flata*, *Spinola*.  
*Pseudoflata*, *Guérin*.

##### 1. DALAPAX POSTICA.

*Dalapax postica*, *Amyot et Serv. Hist. Nat. Hém.* 521, 1.  
*Flata postica*, *Spin. Ann. Soc. Ent. Fr.* viii. 420, 5.  
*Pseudoflata nigricornis*, *Guérin, Icon. Règn. Anim. Terte*, 360.

a—d. From M. Guéinzus' collection.

## Genus 8. FLATA.

Flata, *Fabr., Spin. Ann. Soc. Ent. Fr.* viii. 412.

Cicada, *Fabr., Donovan.*

Fulgora, *Olivier.*

Pœcilopectera, *White* (ad partem).

Flatida, *White* (ad partem).

## 1. FLATA LIMBATA.

White-wax Insect, *Du Halde, L'Histoire de la Chine*, iv. 495, (*Paris Ed.* 1735, fol.) *Sir. G. Staunton's China; Gordon's China, &c.*

Cicada limbata, *Fabr. Ent. Syst.* iv. 27, 3. *Stoll, Cic.* 50, pl. 11, f. 54, 101, pl. 26, f. 45. *Donovan, Ins. China*, pl. 17.

Flata limbata, *Fabr. Ent. Syst. Suppl.* 515, 3. *Syst. Rhyn.* 46, 6. *Spin. Ann. Soc. Ent. Fr.* viii. 415, 1. *Blanch. Hist. Nat. Ins.* iii. 172, 2. *Amoyot et Serv. Hist. Nat. Hém.* 522, 1.

Var. Fulgora pallida, *Oliv. Enc. Méth.* vi. 575, 42. *Stoll, Cic.* 101, pl. 26, f. 144, 145.

a. East India. Presented by E. Doubleday, Esq.

b. East India. From Archdeacon Clerk's collection.

c, d. Silhet. From the Rev. J. Stainforth's collection.

e. Pupa. East India. From Archdeacon Clerk's collection.

f—h. Pupæ. Silhet. From the Rev. J. Stainforth's collection.

## 2. FLATA FLOCCOSA.

Flata floccosa, *Guér. Voy. Belanger, Zool.* 472, pl. 3, f. 4. *Spin. Ann. Soc. Ent. Fr.* viii. 418, 3.

Java.

## 3. FLATA MARGINELLA.

Fulgora marginella, *Oliv. Enc. Méth.* vi. 566, 575, 43.

Cicada marginella, *Stoll, Cic.* 50, pl. 11, f. 54.

Flata nigricornis, *Fabr. Syst. Rhyn.* 45, 1. *Burm. Haudb. Ent.* ii. 1, 163, 1.

a. Assam. Presented by the East India Company.

b. East India. Presented by E. Doubleday, Esq.

c, d. Silhet. From the Rev. J. Stainforth's collection.

## 4. FLATA TINEOIDES.

*Fulgora tineoides*, *Oliv. Enc. Méth.* vi. 564, 576, 47. *Stoll, Cic.* 37, pl. 7, f. 33.

*Flata Stollii*, *Spin. Ann. Soc. Ent. Fr.* viii. 418, 4.

*Pœcilopectera papilionaria*, *White, Ann. Nat. Hist.* xv. 36.

*a.* Java. Presented by J. Wilson, Esq.

*b.* Java. From Mr. Walker's collection.

## 5. FLATA BOMBYCOIDES.

*Flata Bombycoïdes*, *Guér. Icon. Rég. Anim. Texte*, 361.

Malabar.

## 6. FLATA PYRALIS.

*Flata pyralis*, *Guér. Voy. Coquille*, 192. *Atlas. Ins.* pl. 10, f. 11.

Offak.

## 7. FLATA MALGACHA.

*Flata Malgacha*, *Guér. Icon. Rég. Anim. Texte*, 362.

Madagascar.

## 8. FLATA TRICOLOR.

*Pœcilopectera* (*Flatida*) *tricolor*, *White, Ann. Nat. Hist.* xviii. 26.

*a. b.* Silhet. From Mr. Argent's collection.

## 9. FLATA INTACTA, Fem.

*Straminea*; *angusta*; *antennæ stramineæ, apice nigre*; *prothorax et mesothorax tricarinati*; *pedes fulvi*; *tarsi anteriores nigri*; *alæ antice albidæ*; *alæ posticæ albæ*.

Body pale straw-colour: head much narrower than the chest; crown very short; front long and narrow, forming nearly the whole upper side and fore part of the head, with a high ridge on each side, narrower between the antennæ, but slightly increasing in breadth beyond, slightly concave where it joins the epistoma which is lanceolate; side compartments slightly concave: feelers long, straw-colour; third joint black, much longer than the second: fore-chest almost

truncate-conical on the disk, somewhat impressed in front, with three ridges, the side pair slightly diverging from the fore border: middle-chest having also three slight ridges which are a continuation of those on the fore-chest: abdomen obconical, not longer than the chest: legs tawny; anterior tarsi and tips of the anterior tibiae and of the hind tarsi black: wings ample: fore-wings dingy white; veins white; longitudinal veins very numerous; cross-veins very few; fore border very convex, along it a deep row of parallel oblique here and there forked cross-veins of equal length: hind-wings milk-white. Length of the body  $4\frac{1}{2}$  lines; of the wings 22 lines.

*a.* Silhet. From Mr. Stainforth's collection.

#### 10. FLATA MARIA.

Pæcilopectera Maria, *White, Ann. Nat. Hist.* xviii. 25, pl. 1, f. 3.

*a, b.* Silhet. From the Rev. J. Stainforth's collection.

#### 11. FLATA COMPLETA, Feml.

*Fulva, albo farinosa; caput flavum; antennae nigrae; prothorax viridi-flavus, fusco bimaculatus; mesothorax subtricarinatus, lateribus fuscus; abdomen flavum, apice subtilius fuscum; laminae apicales rufo marginatae; pedes nigri; femora viridi-flava; tibiae posticae fulvae; alae albae; alae anticae rufo maculate, nigro obliquè fasciatae et binotatae.*

Body tawny, powdered with white: head pale yellow, much narrower than the chest; crown not visible above; front long and narrow, with a high ridge on each side, occupying the whole upper side and fore part of the head, linear, concave where it joins the epistoma which is lanceolate and tawny; side compartment slightly concave: eyes brassy: feelers black, powdered with white; tips of the joints green; third joint hardly longer than the second: fore-chest pale yellow, tinged with green, conical on the disk, slightly impressed in front, with a large brown spot on the vertical compartment of each side: middle-chest with three very indistinct ridges, mostly brown on each side: abdomen pale yellow, obconical, a little longer than the chest, brown at the tip beneath, furnished with a large mass of white down; lateral plates edged with bright red: legs black; thighs yellow, tinged with green, black towards the tips; hind-shafts tawny: wings ample, milk white: fore-wings with a bright red spot in the disk near the base, a curved and slightly oblique black band in the disk near the tip, and behind it two short

black streaks; veins white; longitudinal veins very numerous; cross-veins not many; fore border convex, along it a deep row of oblique parallel cross-veins of equal length. Length of the body  $4\frac{1}{2}$  lines; of the wings 16 lines.

♂. Silhet. Presented by H. G. Harrington, Esq.

## 12. FLATA TENELLA, Mas et Fem.

*Viridis (mas.) aut viridi-flava (fem.); antennæ viridi-nigræ, (fem.) basi fulvæ; mesothorax tricarinatus; abdomen viridi-flavum; pedes virides; tarsi fusci; tibiæ anteriores fusco vittatæ; alæ antice subvirides, luteo maculatæ, nigro fasciatæ et binotatæ; alæ posticæ albæ.*

*Male.* Body pale green: head much narrower than the chest; crown not visible above: front linear, long and narrow, with a slight arched cross-ridge next the crown, and a high ridge along each side, occupying the whole upper side and fore part of the head, closely joined to the epistoma which is lanecolate: eyes and eyelets red: feelers greenish-black; third joint slightly club-shaped, a little longer than the second: fore-chest conical on the disk: middle-chest with three very indistinct ridges: abdomen pale yellow, obconical, tinged with green, powdered with white, a little longer than the chest; appendages at the tip rather large: legs green; feet dark brown; anterior shanks streaked with brown: wings ample: fore-wings very pale green, with a luteous spot in the disk near the base, an oblique slightly curved, very slender, almost interrupted, black band beyond the middle, and behind it two short black streaks; veins green; longitudinal veins very numerous: cross-veins not many; fore border convex, along it a deep row of oblique parallel cross-veins of equal length: hind-wings milk white.

*Fem.* Body yellow, tinged here and there with green: feelers tawny towards the base; lateral plates at the tip of the abdomen whitish.

Length of the body 4 lines; of the wings 14 lines.

a, b. East India. From Archdeacon Clerk's collection.

## 13. FLATA MATUTINA, Mas.

*Fulva; caput fusco bivittatum; prothorax nigro bifasciatus et bivittatus; pedes nigri; tibiæ posticæ et femora fulva; alæ antice roseæ; alæ posticæ albæ.*

Body tawny: head narrower than the chest, prominent; crown extremely short; front linear, slightly convex, with a high black-



edged rim on each side where it forms a right angle, concave where it joins the epistoma, its length much exceeding its breadth; a dark brown stripe along each rim; epistoma lanceolate, with two brown stripes: fore-chest very slightly concave on the hind border, truncate-conical in front, with two conical black stripes on the disk, and with an oblique black band on each side: middle-chest full twice the length of the fore-chest; abdomen obconical, not longer than the chest; plates at the tip very large: legs black: thighs and hind-shanks tawny: wings ample; fore-wings pale rose-colour; longitudinal veins very numerous; cross-veins very few; fore border convex; along it a row of oblique parallel cross-veins: hind-wings milk white. Length of the body 4 lines; of the wings 20 lines.

a. Java. From Mr. Argent's collection.

#### 14. FLATA INORNATA.

*Fulva*; *antennae nigrae, longae, basi fulvae*; *mesothorax tricarinatus*; *pedes fulvi*; *tarsi nigri*; *alae anticae fulvae*; *alae posticae limpidae*.

Body tawny: head prominent, narrower than the chest; crown extremely short; front linear, horizontal next the crown, vertical in the fore part, slightly convex, with a high rim on each side where it forms a right angle, concave where it joins the epistoma, its length very much exceeding its breadth; epistoma lanceolate: antennae black, very long, tawny towards the base: fore-chest straight behind, conical in front, its length about one-fourth of its breadth: middle-chest rather more than twice the length of the fore-chest, with three indistinct ridges: disk flat: abdomen obconical, a little longer than the chest: legs tawny; feet and tips of the fore-shanks black: fore-wings dull pale tawny; veins yellow; longitudinal veins very numerous, much ramified; cross-veins few; fore border very convex, along it a row of oblique rather long cross-veins which are mostly forked, and here and there connected by ramifications: hind-wings colourless. Length of the body 6 lines; of the wings 20 lines.

a. Tenasserim.

#### 15. FLATA NIVIS, Fem.

*Viridis, crassa*; *caput breve, fere conicum, subascendens*; *antennae nigrae*; *abdomen oratum*; *alae albae*.

Body green, very stout, thickly powdered with white: head short; crown almost conical and slightly ascending in the middle; front slightly convex, a little broader towards the epistoma, straight

on each side, bordered by a rim, almost straight where it joins the epistoma, very much longer than broad; epistoma rather long; side compartments small: second joint of the feelers black, linear, very long: fore-chest as long as the head, convex in front, slightly concave behind, a little longer in the middle than on each side: middle-chest full thrice the length of the fore-chest: abdomen oval, very thick, a little longer than the chest: legs pale green, powdered with white: wings white: hind-wings rounded along the tips and between the latter and the hind borders; fore border undulating; veins whitish; longitudinal veins very few, forked towards the tips: cross-veins none with the exception of very few rudiments. Length of the body  $3\frac{1}{2}$  lines; of the wings 10 lines.

*a.* Port Natal. From M. Gueinzus' collection.

### Genus 9. COLOBESTHES.

*Colobesthes*, *Amyot et Serr. Hist. Nat. Hém.* 522, 4, 11.

*Flata*, *Fabr.*

*Cicada*, *Donovan.*

*Pæcilopectera*, *Burmeister, Spinola.*

#### 1. COLOBESTHES FALCATA.

*Colobesthes falcata*, *Amyot et Serr. Hist. Nat. Hém.* 523, 1.

*Pæcilopectera falcata*, *Guér. Voy. Belanger*, 469, pl. 3, f. 5. *Spin.*

*Ann. Soc. Ent. Fr.* viii. 430, 7.

*a.* Java. From Mr. Argent's collection.

*b.* ———?

#### 2. COLOBESTHES CANDIDA.

*Flata candida*, *Dunéril, Cons. Gén. Ins.* 219, pl. 38, f. 1.

*Pæcilopectera candida*, *Burm. Handb. Ent.* ii. 1, 162, 1. *Spin. Ann.*

*Soc. Ent. Fr.* viii. 431, 8.

*Flata candida*, *Fabr. Ent. Syst. Suppl.* 517, 3. *Syst. Rhyn.* 45, 2.

*a, b.* Java. From Mr. Argent's collection.

*c.* ———?

#### 3. COLOBESTHES TRUNCATICORNIS.

*Pæcilopectera truncaticornis*, *Spin. Ann. Soc. Ent.* viii. 429, 6, pl. 16, f. 3.

*a.* Philippine Islands. From Mr. Cuming's collection.

## 4. COLOBESTHES COROMANDELICA.

*Pœcilopectera coromandelica*, *Spin. Ann. Soc. Ent. Fr.* viii. 440, 15.  
Coromandel.

## 5. COLOBESTHES PUSTULATA.

*Cicada pustulata*, *Donovan, Ins. New Holland*, pl. 9.  
New Holland.

## 6. COLOBESTHES ADSCENDENS?

*Flata adscendens?* *Fabr. Syst. Rhyn.* 46, 5.  
*a.* Ashanti. From the Wesleyan Missionary Society's collection.

## 7. COLOBESTHES CONSPERSA, MRS et FEM.

*Fulva*; *prothorax carinatus*; *mesothorax tricarinatus*, *pedes fulvi*;  
*ala antica cervina*, *falcata*, *nigro conspersa*; *ala postica*  
*alba*.

Body tawny: head narrower than the chest; crown very short, straight, longer on each side than in the middle; front conical above; fore part paler, slightly convex, rounded on each side, not narrower towards the epistoma, bordered by a rim, slightly concave where it joins the epistoma, the latter is lanceolate; side part slightly concave, surrounding the eye and the antenna: fore-chest concave on the hind border, truncate-conical in front, bordered by a slight rim, and having a middle ridge: middle-chest much more than twice the length of the fore-chest, with three ridges, the side pair slightly curved and inclosing a flat spindle-shaped compartment: abdomen obconical, longer than the chest, powdered with white: legs pale tawny: wings ample: fore-wings pale fawn-colour, sprinkled with black which is chiefly on the cross-veins, convex on the fore border, truncate at a right angle along the tip, concave on the hind border at whose tip they are produced into an acute angle or hook; veins pale tawny; longitudinal veins and cross-veins very numerous; along the fore border a row of oblique rather long cross-veins which are mostly forked and are shorter towards the tip: hind-wings milk white. Length of the body 5—7 lines; of the wings 18—22 lines

*a.* East India. From Archdeacon Clerk's collection.

*b.* Assam. From Mr. Warwick's collection.

*c.* Silhet. From the Rev. J. Stainforth's collection.

## 8. COLOBESTHES GUTTIFASCIA.

*Straminea*; mesothorax *tricarinatus*; pedes *straminei*; alæ *late*; alæ *antica substramineæ*, ad apices guttis *fuscis trifasciatis*, margine *postico uniguttatæ*, disco *obliquè fasciatis*; alæ *posticæ albæ*.

Body straw-colour: head wanting: middle-chest with three parallel ridges: abdomen wanting: legs pale straw-colour: wings ample: fore-wings very pale straw-colour, with three irregular rows of brown dots along their tips; a larger dot on the hind border beyond the middle; and an oblique band extending from the hind border near the base to near the tip of the fore border, blackish-brown at its base, afterwards tawny and very indistinct; inner angles slightly falcate; veins pale straw-colour; longitudinal veins very numerous; cross-veins very few; fore border very slightly convex, along it a row of oblique parallel cross-veins of equal length: hind-wings milk-white. Length of the body 5 lines: of the wings 18 lines.

a. Philippine Islands. From Mr. Cuning's collection.

## 9. COLOBESTHES BIGUTTA, Fem.

*Flavo-viridis*, alba *farinosa*; frons et prothorax *carinati*; mesothorax *bicarinatus*; pedes *virides*; tarsi *fulvi*; alæ *late*; alæ *antica albo-virides*, flava aut *rufo marginatæ*, apice *truncatæ subfalcatæ*, margine *postico tuberculatæ fusco-guttatæ*; alæ *posticæ albæ*.

Body yellowish-green, powdered with white: head narrower than the chest, very short; crown very short, almost hidden by the fore-chest: front slightly increasing in breadth from the crown till near the epistoma, bordered by a rim, not rounded on each side, straight where it joins the epistoma, having a slight middle ridge which disappears in the disk; its length much exceeding its breadth: epistoma lanceolate: feelers green: fore-chest conical above, slightly concave along the hind border, bordered by a rim, having a distinct middle ridge: middle-chest rather more than twice the length of the fore-chest, with a middle green stripe, and on each side a slight ridge: abdomen obconical, a little longer than the chest: legs pale green, powdered with white; feet tawny: wings ample; fore-wings whitish-green, truncate at the tips, slightly falcate at the inner angle, with a brown dot on the hind border at two-thirds of the length; fore border pale yellow; hind border tuberculate along half the length from the base; veins green; longitudinal veins rather numerous; cross-veins

very numerous, ramified and irregular in the disk, regular and forming square areolets towards the tip where there is a row of short longitudinal veins: fore border very convex near the base; along it a row of oblique parallel cross-veins which become short and irregular towards the tip: hind-wings milk-white.

*Var.* Borders of the fore-wings, especially the fore border, bright red, Length of the body 4 lines; of the wings 10 lines

*a, b.* Port Natal. From M. Gueinzus' collection.

### Genus 10. PHYLLYPHANTA.

*Phyllyphanta*, *Amyot et Serv. Hist. Nat. Hém.* 523, 412.

*Pæcilopectera*, *Spinola*.

#### 1. PHYLLYPHANTA PRODUCTA.

*Phyllyphanta producta*, *Amyot et Serv. Hist. Nat. Hém.* 523, 1.

*Pæcilopectera producta*, *Spin. Ann. Soc. Ent. Fr.* viii. 432, 9.

*a.* South America. From Mr. Warwick's collection.

### Genus 11. PÆCILOPTERA.

*Pæcilopectera*, *Latr. Gen. Crust. et Ins.* iii. 165.

*Cicada*, *Linn., Degeer, Fabr., Stoll, Gmelin, Sulzer, Donovan.*

*Flata*, *Fabr., Spinola* (ad partem).

*Fulgora*, *Linn., Fabr., Gmel., Oliv.*

*Ricania*, *Germar* (ad partem), *Güérin* (ad partem).

#### 1. PÆCILOPTERA PHALÆNOIDES.

*Pæcilopectera phalænoides*, *Germ. Mag. Ent.* iii. 221, 1. *Burm. Hand.*

*Ent.* ii. 1, 162, 2. *Spin. Ann. Soc. Ent. Fr.* viii. 423, 1.

*Amyot et Serv. Hist. Nat. Hém.* 524, 1. *Crochard, Ed. Règne*

*Anim. Ins.* pl. 97, f. 5.

*Flata phalænoides*, *Fabr. Ent. Syst. Suppl.* 517, 1. *Syst. Rhyn.* 46,

4. *Stoll, Cic.* 23, pl. 2, f. 9.

*Cicada phalænoides*, *Linn. Syst. Nat.* ii. 710, 40. *Sp. Ins.* ii. 323,

5. *Mant. Ins.* ii. 268, 5. *Fabr. Ent. Syst.* iv. 28, 5. *Gmel.*

*Ed. Syst. Nat.* i. 3, 2112, 40. *Stoll, Cic.* 23, pl. 2, f. 9. *Sulz.*

*Hist. Ins.* pl. 9, f. 10. *Deg. Ins.* iii. 222, 19, pl. 33, f. 6.

*Fulgora phalænoides*, *Oliv. Enc.* vi. 575, 44.

*a—c.* Para. Presented by Sir E. Home.

- d. Guayaquil. Presented by Dr. Hooker.  
 e. British Guiana. Presented by Sir. R. Schomburgck.  
 f. Rio Doce, Brazil. Presented by J. Bowring, Esq.  
 g. Brazil. From Mr. Swainson's collection.  
 h, i. ———?

## 2. PÆCILOPTERA AURORA.

- Pæcilopectera aurora, *Guér. Voy. Belang. Zool.* 469.  
 Flata aurora, *Spin. Ann. Soc. Ent. Fr.* viii. 416, 2.  
 a, b. Java. From Mr. Children's collection.  
 c. Java. From Mr. Walker's collection.

## 3. PÆCILOPTERA MACULATA.

- Pæcilopectera maculata, *Guér. Voy. Belang.* 470, *Icon. Règne Anim.*  
*Ins.* pl. 58, f. 7. *Spin. Ann. Soc. Ent. Fr.* viii. 425, 3.  
 a. Java. From Mr. Walker's collection.

## 4. PÆCILOPTERA MELANARIA.

- Pæcilopectera melanaria, *Spin. Ann. Soc. Ent. Fr.* viii. 424, 2.  
 Cayenne.

## 5. PÆCILOPTERA MARGINELLA.

- Pæcilopectera marginella, *Spin. Ann. Soc. Ent. Fr.* viii. 433, 10.  
 Ricania marginella, *Guér. Voy. Belang.* 467 *Icon. Règne Anim.*  
*Ins.* pl. 58, f. 6.  
 Cochin China.

## 6. PÆCILOPTERA ASPERICOLLIS.

- Pæcilopectera aspericollis, *Spin. Ann. Soc. Ent. Fr.* viii. 434, 11.  
 Interior of Brazil.

## 7. PÆCILOPTERA SEPTENTRIONALIS.

- Pæcilopectera septentrionalis, *Spin. Ann. Soc. Ent. Fr.* viii. 436, 12.  
 North America.

## 8. PÆCILOPTERA BRASILIENSIS.

Pæcilopectera Brasiliensis, *Spin. Ann. Soc. Ent. Fr.* viii. 438, 13.  
Brazil.

## 9. PÆCILOPTERA DOMINICENSIS.

Pæcilopectera Dominicensis, *Spin. Ann. Soc. Ent. Fr.* viii. 439, 14.  
St. Domingo.

## 10. PÆCILOPTERA OCELLATA.

Pæcilopectera ocellata, *Burm. Spin. Ann. Soc. Ent. Fr.* viii. 441, 16.  
Cicada ocellata, *Fabr. Ent. Syst.* iv. 27, 2.  
Flata ocellata, *Fabr. Ent. Syst. Suppl.* 517, 2. *Syst. Rhyn.* 49, 18.  
Ricania ocellata, *Germ. Mag. Ent.* iii. 224, 1.  
Java.

## 11. PÆCILOPTERA RICANOIDES.

Pæcilopectera ricanioïdes, *Spin. Ann. Soc. Ent. Fr.* viii. 442, 17, pl.  
15, f. 7.  
North Mexico or California.

## 12. PÆCILOPTERA ACUMINIPENNIS.

Pæcilopectera acuminipennis, *Spin. Ann. Soc. Ent. Fr.* viii. 445, 18  
St. Domingo.

## 13. PÆCILOPTERA CRUENTATA.

Flata cruentata, *Fabr. Syst. Rhyn.* 46, 7.  
Amboina.

## 14. PÆCILOPTERA VIRIDANA.

Cicada viridana, *Donovan, Ins. New Holland*, pl. 9.  
New Holland.

## 15. PÆCILOPTERA MODESTA.

*Cicada modesta*, *Donovan, Ins. New Holland*, pl. 9.  
New Holland.

## 16. PÆCILOPTERA EMORTUA.

*Flata emortua*, *Fabr. Syst. Rhyn.* 46, 3. *Stoll, Cic.* 64, pl. 16, f. 84.  
Surinam.

## 17. PÆCILOPTERA ROSCIDA.

*Pæciloptera roscida*, *Germ. Mag. Ent.* iv. 104, 8.  
Brazil.

## 18. PÆCILOPTERA ALBICOSTA.

*Pæciloptera albicosta*, *Guér. Icon. Règne Anim. Texte*, 360.  
Malacca.

## 19. PÆCILOPTERA DENTIFRONS.

*Pæciloptera dentifrons*, *Guér. Icon. Règne Anim. Texte*, 360.  
Malabar.

## 20. PÆCILOPTERA FOLIUM.

*Fulgora folium*, *Deg. Ins.* iii. 284, 7, pl. 32, f. 7. *Gmel. Ed. Syst.*  
*Nat.* i. 4, 2092, 21.  
South America.

## 21. PÆCILOPTERA UNIPUNCTATA.

*Fulgora unipunctata*, *Oliv. Enc. Méth.* vi. 566, 576, 45.  
Senegal.

## 22. PÆCILOPTERA TORTRICINA.

*Pæciloptera tortricina*, *Germ. Mag. Ent.* iv. 1036.  
*a.* Honduras. From Mr. Dyson's collection.



## 23. PÆCILOPTERA CIRCULATA.

*Pæcilopectera circulata*, Guér. *Icon. Règne Anim. Texte*, 361.

*Pæcilopectera Dianthus*, White, *Ann. Nat. Hist.* xv. 36.

a. Java. From Mr. Leadbeater's collection.

b. Java. From Mr. Walker's collection.

## 24. PÆCILOPTERA FRITILLARIA.

*Pæcilopectera fritillaria*, Erich. *Schomb. Reis.* iii. 614.

British Guiana.

## 25. PÆCILOPTERA UMBRACULATA?

*Flata umbraculata*? *Fabr. Syst. Rhyn.* 50, 52.

*Pæcilopectera umbraculata*? *Burm. Handb. Ent.* ii. 1, 162, 3.

*Pæcilopectera pyralina*? *Germ. Mag. Ent.* iv. 104, 7.

a. ———?

## 26. PÆCILOPTERA TRUNCATA?

*Fulgora truncata*? *Linn. Syst. Nat.* ii. 704, 8. *Aman. Acad.* vi.

309, 40. *Gmel. Ed. Syst. Nat.* i. 4, 2091, 8. *Fabr. Sp. Ins.* ii.

315, 11. *Mant. Ins.* ii. 261, 13. *Ent. Syst.* iv. 4, 13. *Syst.*

*Rhyn.* 4, 13.

a. North Bengal. From Miss Campbell's collection.

## 27. PÆCILOPTERA SUFFUSA, Mas et Fern.

*Rufa-fulva*; *frons tricarinatus*; *prothorax flavo vittatus*; *mesothorax subcarinatus, flavo trivittatus*; *pectus et abdomen fulva, albo farinosa*; *pedes fulvi*; *alæ antice rufæ, albo farinose*; *alæ postice albæ, apice rosæ*.

Body reddish-tawny: head nearly as broad as the chest; crown very short, concave behind, straight along the fore border, longer on each side than in the middle; front flat, rounded on each side, but slightly concave and much narrower towards the epistoma, bordered by a rim, convex where it joins the epistoma, with three ridges which extend from the fore border to the disk, its breadth rather less than its length; epistoma lanceolate, slightly convex; fore-chest with a pale yellow middle stripe, slightly concave behind,

very convex on the fore border, furrowed transversely on each side where its length is little more than half of that in the middle: middle-chest nearly four times the length of the fore-chest, with three slight pale yellow stripes, and with an indistinct middle ridge; disk flat: hind-chest, breast and abdomen tawny, powdered with white: abdomen obconical, longer than the chest; appendages large: legs tawny: wings ample; fore-wings red, powdered with white; longitudinal veins and cross-veins extremely numerous; fore border slightly convex, along it a row of oblique generally parallel cross-veins: hind-wings snowy white with rosy tips. Length of the body  $4\frac{1}{2}$ —5 lines; of the wings 20—22 lines.

a, b. Java. From Mr. Argent's collection.

## 28. PECTILOPTERA COMMA, Mas.

*Sublutea*; *frons subcarinatus*; *prothorax bicarinatus*; *mesothorax subtricarinatus*; *pedes fulci*; *tarsi anteriores nigri*; *alae antice subluteae, nigro binotatae*; *alae posticae albae*.

Body buff: head narrower than the chest; crown short, with a rim in front, its breadth about four times its length; front above about the length of the crown, rounded on the fore part where it becomes vertical, with a rim on each side where it is rounded, straight when it joins the epistoma, with a very indistinct middle ridge; epistoma triangular; side compartments of the head slightly concave, including the eyes and the antennae whose three joints are of equal length: fore-chest much broader than long on the disk, nearly straight behind and in front where it has a rim, a curved ridge on each side where it becomes vertical and slightly concave, and forms apparently one compartment with that on each side of the head: beyond this there is a slanting plate with a rim in front: middle-chest with three indistinct ridges: abdomen obconical, powdered with white, a little longer than the chest; valves and other appendages at the tip large: legs tawny; anterior feet and tips of the anterior shanks and of the hind-feet black: wings ample: fore-wings buff; a very short and slender slightly oblique black streak in the disk; an oblong black dot near the hind border at one-third of the length from the base; veins buff; longitudinal veins very numerous; cross-veins rather numerous in the disk; fore border very convex, along it a row of oblique parallel cross-veins which are shortened at one-third of the length from the base and again near the tip where they are more frequently forked: hind-wings milk-white. Length of the body  $4\frac{1}{2}$  lines; of the wings 18 lines.

a. Silhet. From the Rev. J. Stainforth's collection.

## 29. PÆCILOPTERA ADDITA, Mas.

*Viridis; prothorax carinatus; mesothorax subcarinatus; abdomen viridi-flavum; pedes virides; tarsi fulvi; alæ anticæ subvirides, albo suffusæ; alæ posticæ albæ.*

*Cicada, &c. Stoll, Cic. 76, pl. 19, f. 103\**

Body pale green: head very short, a little narrower than the chest; crown hardly visible above; front narrowest next the crown, slightly increasing in breadth till near the epistoma, bordered by a rim, a little rounded on each side, straight where it joins the epistoma, its length rather less than twice its breadth; epistoma triangular; compartment on each side slightly concave: feelers yellow: fore-chest conical, with a middle ridge, bordered by a rim: middle-chest very indistinctly ridged: abdomen obconical, greenish-yellow, powdered with white, longer than the chest; appendages of the male large, of the usual form; legs pale green; feet tawny: wings ample: fore-wings pale green, powdered with white; veins green; longitudinal veins and cross-veins very numerous; fore border slightly convex, along it a row of oblique parallel cross-veins which become rather shorter towards the tip: hind-wings milk-white. Length of the body 3—3½ lines; of the wings 12—14 lines.

*a—c. ——— ?*

## 30. PÆCILOPTERA ACUTA, Mas et Fem.

*Flavo-viridis, tuberculata; caput conicum, rufo marginatum; frons prothorax et mesothorax tricarinati; pedes flavo-virides; tibiæ rufo vittatæ; tarsi rufi; alæ anticæ virides, ad margines tuberculatæ et rufæ, apice truncatæ; alæ posticæ albæ.*

Body yellowish-green, tuberculate: head conical, narrower than the chest; crown broader than long, bordered by a rim which is bright red in front; front bordered by a rim, adorned with indistinct green ramifications, having three very indistinct ridges, tinged with red and slightly rounded on each side, a little narrower on approaching the epistoma which is lanceolate: fore-chest truncate-conical on the disk, with three ridges, concave and slightly angular on the hind border; its length about one-fourth of its breadth: middle-chest rather more than twice the length of the fore-chest, with a ridge on each side and a more indistinct middle ridge: abdomen obconical, a little longer than the chest: legs yellowish-green; shanks striped with red; feet mostly red: wings ample: fore-wings green, tuberculate along the borders which are red, truncate at the tips; inner angle slightly acute veins green; longitudinal veins

tolerably numerous, ramifying from three or four radical veins; cross-veins very numerous; fore border convex, along it a row of oblique parallel cross-veins; hind-wings milk-white. Length of the body 3 lines; of the wings 9 lines.

a. New Holland. Presented by F. Walker, Esq.

b. New Holland. From Mr. Walker's collection.

c, d. ——— ?

### 31. PÆCILOPTERA PERFECTA, Mas.

*Viridi-fulva; frons et thorac carinati; pedes fulvi; tarsi ferruginei; tibiæ posticæ virides; alæ late; alæ anticæ virides, rufo marginatæ, apice truncatæ, margine postico tuberculatæ; alæ posticæ albæ.*

Body tawny, tinged with green, rather broad: head a little narrower than the chest; crown very short, not visible above; front very much broader than long, straight where it joins the epistoma, bordered by a rim, rounded on each side, with a middle ridge which disappears in the disk; epistoma triangular, not ridged: fore-chest very slightly convex behind, very convex in front, with a slight middle ridge, its length on each side about half of that in the middle: middle-chest full thrice the length of the fore-chest, flat above, with a middle ridge: abdomen obconical, powdered with white, a little longer than the chest: legs tawny; feet ferruginous; hind-shanks green: wings broad: fore-wings green, edged with red, truncated at the tips, tuberculated along part of the hind border, forming a right angle between that and the tip, having a very deep border whose veins are not reticulated and have a construction different from that in the disk; veins green; longitudinal veins very numerous; cross-veins very numerous in the disk; fore border slightly convex, along it a row of oblique parallel cross-veins which become longer and more oblique towards the tip, and there associate with the longitudinal veins: hind-wings milk-white; veins pale yellow. Length of the body 5 lines; of the wings 14 lines.

a. Jamaica. From Mr. Gosse's collection.

b. ——— ?

### 32. PÆCILOPTERA ROBUSTA, Fem.

*Fulva; frons et prothorax carinati; mesothorax tricarinatus; pedes flavo-virides; tibiæ rufo vittatæ; tarsi plerumque rufi; alæ late; alæ anticæ virides, ad margines rufas tuberculatæ, apice truncatæ, posticæ acutæ; alæ posticæ albæ.*

Body tawny: head a little narrower than the chest, crown very short, not visible above; front occupying the whole upper and fore

part of the head, increasing in breadth towards the epistoma; bordered by a rim, having a middle ridge, almost angular on each side, deeply notched where it joins the epistoma, its breadth in front much exceeding its length; epistoma ridged at the base: tip of the mouth black: fore-chest slightly concave behind, very convex on the fore border, with a middle ridge, its length in the middle much exceeding that on each side: middle-chest more than four times the length of the fore-chest, with three ridges, the side pair slightly diverging; a cross suture near the tip which is lanceolate: abdomen obconical, hardly longer than the chest; appendages at the tip large: legs tawny; feet and fore-shanks ferruginous: wings broad; fore-wings green, edged with dark red, very convex on the fore border, slightly convex at the tips, a little rounded and not angular between the tips and the hind border; veins pale yellow; longitudinal veins and cross-veins very numerous, occupying the whole surface with irregular ramifications: hind-wings white. Length of the body  $3\frac{1}{2}$ —4 lines; of the wings 10—11 lines.

*a, b.* Jamaica. From Mr. Gosse's collection.

### 33. PŒCILOPTERA LACTIFREA.

*Straminea; mesothorax luteo bivittatus; pedes straminei; alæ albæ.*

Body pale straw-colour, powdered with white: head a little narrower than the chest, very short; crown hardly visible above; front very short above, large and flat on the fore part, with a very short ridge, rounded on each side, narrower towards the epistoma, bordered by a rim, straight when it joins the epistoma, its breadth exceeding its length; epistoma lanceolate: fore-chest arched: middle-chest with two luteous stripes, more than thrice the length of the fore-chest: abdomen obconical, not longer than the chest: legs pale straw-colour, powdered with white: wings white, broad; veins pale straw-colour; longitudinal veins of the fore-wings numerous; cross-veins not numerous; fore border slightly convex; along it a row of oblique, parallel, here and there forked, cross-veins. Length of the body 3 lines; of the wings 10 lines.

*a.* East India. From Mr. Argent's collection.

*b.* North India. From Mr. Warwick's collection.

## 34. PÆCILOPTERA COMPLETA, Fem.

*Sublutea* ; *frons supra bicarinatus, anticè carinatus* ; *prothorax et mesothorax tricarinati* ; *abdomen apice subretusum* ; *pedes pallidè lutei* ; *alæ anticæ subluteæ, apice truncatæ, posticæ subacutæ* ; *alæ posticæ albæ*.

Body buff: head a little narrower than the chest; crown not visible above; front short, and with an oblique ridge on each side above; its fore-part flat, rounded on each side, narrower towards the epistoma, slightly ridged, with a rim on each side, straight where it joins the epistoma; its length exceeding its breadth; epistoma lanceolate: fore-chest concave behind, more convex on the fore border, with three indistinct ridges, the side pair slightly oblique: middle-chest about four times the length of the fore-chest, with three ridges, the side pair slightly oblique: abdomen obconical, a little longer than the chest, slightly curved upward at the tip: legs buff: wings broad: fore-wings buff, truncate at the tips, between which and the hind border the angle is very slightly acute; veins luteous; longitudinal veins and cross-veins very numerous; fore border very slightly convex, along it a row of oblique parallel cross-veins: hind-wings milk-white. Length of the body 5 lines; of the wings 16 lines.

a. Java. From Mr. Argent's collection.

## 35. PÆCILOPTERA SINENSIS, Mas et Fem.

*Lutea* ; *subcompressa, viridi varia* ; *caput conicum, subascendens, apice fuscum* ; *thorax viridi et albo fasciatus* ; *mesothoracis discus luteus* ; *abdomen cristatum* ; *pedes virides* ; *alæ anticæ virides, apice truncatæ et fusco guttatæ, margine postico tuberculatæ* ; *areolarum disci limpidi* ; *alæ posticæ albæ*.

Body pale luteous, tinged with green: head conical, slightly compressed, somewhat ascending, with a brown tip; crown concealed; front convex, short above, much longer and bordered by a rim on the fore side, broader and flat towards the epistoma, which it joins by a straight suture; epistoma triangular, with oblique darker stripes on each side; on each side a somewhat oval slightly concave compartment surrounds the eye and the feeler, the bristle of the latter is black at the base: thorax slightly compressed: fore-chest conical, adorned with an emerald green middle stripe and on each side with green spots, its length on each side not one-fourth of that in the middle: middle-chest almost twice the length of the fore-chest, bright luteous on the disk, with an emerald-green stripe on each

side, and with a slender white middle stripe: abdomen obconical whitish-green, a little longer than the chest, crested above; upper appendages inclined downward, forming an obtuse angle, and meeting the lower appendage which is curved upward and is furnished with upright tawny spines: legs pale green; feet partly tawny: wings broad; fore-wings pale green, tuberculate along the hind border towards the base, truncate at the tips, along which and along the adjoining parts of the fore border and of the hind border there is a row of brown dots; hind angles hardly acute; veins green; cross-veins very numerous; disks of the arcolelets colourless; fore border convex; along it a row of parallel, slightly oblique, here and there forked, cross-veins which are shorter and irregular towards the tip: hind-wings white. Length of the body  $3\frac{1}{2}$ —4 lines; of the wings 11—12 lines.

*a, b.* Hong-Kong. Presented by J. C. Bowring, Esq.

### 36. POECILOPTERA PRODUCTA, Mas.

*Lutea, subcompressa; caput conicum, rix ascendens; thorax tricarinatus; abdomen cristatum; pedes posticè virides; alæ anticae virides, apice truncatae et fusco guttatae, margine postico tuberculatae; areolarum disci limpidi; alæ posticae albae.*

Nearly allied to *P. sinensis*, but differing in the shape and neururation of the fore-wings. Body luteous: head conical, hardly ascending, terminating in a sharper tip than that of *P. sinensis*; crown concealed; front convex, short and with a middle ridge above, flat, much longer and broader and bordered by a rim on the fore side, slightly concave where it joins the epistoma which is triangular; an oval slightly concave compartment on each side surrounding the eye and the feeler, the bristle of the latter is black: thorax slightly compressed: fore-chest conical, green, tuberculate, with a middle ridge and somewhat reticulated with ridges on each side, slightly concave at the tip; its length on each side about half of that in the middle, but it lengthens again towards the breast: middle-chest near thrice the length of the fore-chest, with three ridges, the middle one more strongly marked than the side pair which are slightly curved outward: abdomen obconical, hardly longer than the chest, crested above; appendages at the tip much like those of *P. sinensis*: legs pale luteous; hind-legs pale green: wings broad; fore-wings green, tuberculate along the hind border for two-thirds of the length from the base, truncate at the tips, along which and along the adjoining parts of the fore border and of the hind border there is a row of brown dots; hind angles acute; veins green; cross-veins very nu-

merous ; disks of the areolets mostly pale ; fore border very convex, along it a row of stout parallel oblique cross-veins which slightly decrease in length from the base to two-thirds of the length where they terminate : hind-wings white. Length of the body  $3\frac{1}{2}$  lines ; of the wings 12 lines.

### 37. PECILOPTERA CUPIDO, Mas.

*Crocea, tuberculata ; caput conicum, depressum, vix ascendens ; thorax tricarinatus ; abdomen cristatum ; pedes flavi ; tarsi rufi ; alæ anticae croceae, apice truncatae et rufo guttatae, marginè postico tuberculatae ; alæ posticae albae.*

Body saffron-colour, tuberculated : head conical, flat, hardly ascending ; crown concealed ; front short above, much longer and with a slight middle ridge on the fore side, somewhat rounded on each side, straight where it joins the epistoma ; the latter is triangular and has a slight middle-ridge ; side compartments nearly triangular : fore-chest conical, as long as the head, concave on the hind border, longer in the middle than each side : middle-chest more than twice the length of the fore-chest, with three slight ridges : abdomen obconical, crested, a little shorter than the chest : legs pale yellow ; feet and tips of the shanks red : wings broad ; fore-wings saffron-colour, powdered with white beneath, truncate at the tips, along which and along the adjoining parts of the fore border and of the hind border there is a row of red dots ; a stripe of red tubercles along the hind border decreases in breadth from the base ; tip and hind border forming a right angle ; veins red : longitudinal veins rather numerous, ramified ; cross-veins very numerous ; areolets minutely mottled, their disks pale ; fore border slightly convex, along three-fourths of it a row of oblique parallel here and there forked cross-veins : hind-wings white. Length of the body  $2\frac{1}{2}$  lines ; of the wings 8 lines.

### 38. PECILOPTERA STELLARIS.

*Lutea ; caput perbreve ; prothorax viridi marginatus ; mesothorax carinatus ; tarsi sufferruginei ; alæ anticae virides, ferrugineo maculatae, apice truncatae, marginè postico tuberculatae ; alæ posticae albae.*

Body luteous : head very short ; crown short, very slightly arched, bordered by a rim ; front flat, a little broader towards the



epistoma, slightly rounded on each side, bordered by a rim, concave where it joins the epistoma, with three ridges, the side pair curved and indistinct; the compartments on each side oval and concave; epistoma triangular, very slightly convex: fore-chest bordered with green, almost conical in front, slightly concave behind, with a middle ridge; its length on each side less than half of that in the middle: middle-chest with a slight ridge, about four times the length of the fore-chest: legs pale luteous; feet slightly ferruginous: wings broad: fore-wings pale green, adorned with several ferruginous spots and dots whose disks are mostly brown, truncated at the tips which form right angles with the hind borders, the latter are dilated and slightly tuberculate towards the base; fore border convex, along it a row of parallel oblique cross-veins which are shorter and irregular towards the tip; veins pale green; longitudinal and cross-veins very numerous; hind-wings white. Length of the body  $3\frac{1}{2}$  lines; of the wings 11 lines.

Africa.

### 39. PECTILOPTERA OCELLATA? Mas.

*Lutea*; *caput perbreve*; *prothorax carinatus*; *mesothorax viridi varius*; *pedes flavi*, *ale antice virides*, *ferrugineo maculata*, *apice truncata*, *marginé postico rix tuberculata*; *ale postice albae*.

*Cicada ocellata*? *Fabr. Ent. Syst.* iv. 27, 2.

*Flata ocellata*? *Fabr. Syst. Rhyn.* 49, 8.

Nearly allied to *P. stellaris* but smaller, and with fewer and smaller spots on the fore-wings. Body pale luteous: head very short; crown short, arched, bordered by a rim; front flat, a little broader towards the epistoma, slightly rounded on each side, bordered by a rim, hardly concave where it joins the epistoma, with three ridges, the side pair indistinct; the compartment on each side oval and concave: epistoma triangular, very slightly convex: fore-chest almost conical in front, slightly concave behind, with a middle ridge; its length on each side more than half of that in the middle: middle-chest tinged with green, more than three times the length of the fore-chest: abdomen obconical, a little longer than the chest; appendages large, of the usual form: legs pale yellow: wings broad: fore-wings pale green, tinged with white beneath, adorned with several ferruginous dots whose disks are brown, truncated at the tips which form right angles with the hind borders, the latter are dilated but hardly tuberculated towards the base; fore border convex, along it a row of parallel oblique cross-veins which decrease in length from

the base; veins green; longitudinal and cross-veins very numerous: hind-wings white. Length of the body  $3\frac{1}{2}$  lines; of the wings 10 lines.

*a.* Tranquebar.

#### 40. PŒCILOPTERA MUNDA, Fem.

*Crocea; caput subacutum; mesothorax tricarinatus; abdomen cristatum; pedes rufi; femora viridia; alæ anticae croceae, apice truncatae, margine postico tuberculate; alæ posticae albae.*

Body pale saffron-colour: head of moderate length; crown conical and almost acute in front, concave on the hind border, with a ridge in the middle which is longer than each side; front flat, a little broader towards the epistoma, straight on each side, bordered by a slight rim, straight where it joins the epistoma, with three distinct ridges, its length much exceeding its breadth; the compartment on each side nearly triangular, hardly concave; epistoma yellow, triangular, very slightly convex: fore-chest longer than the crown, very convex in front, more slightly concave behind, with a ridge in the middle whose length slightly exceeds that of each side: middle-chest about three the length of the fore-chest, with three ridges, the side pair slightly curved, inclining to each other and united near the hind border, where there is a cross-suture: abdomen obconical, crested above, a little longer than the chest: legs pale red; hips and thighs pale green: wings broad; fore-wings pale saffron-colour, truncated at the tips which form slightly obtuse angles with the hind borders, the latter have a tuberculated region which is very broad at the base and tapers thence along two-thirds of the length where it terminates; fore border convex, along it a row of oblique parallel often forked cross-veins which terminate at three-fourths of the length, a dot on each space between the veins; longitudinal veins rather numerous, much ramified; cross-veins very numerous, paler than the longitudinal veins; disks of the arcolelets whitish: hind-wings white. Length of the body 3 lines; of the wings 10 lines.

*a.* New Holland. Presented by the Haslar Hospital.

## 41. PÆCILOPTERA TESTACEA, Mas.

*Testacea* ; caput perbreve ; mesothorax tricarinatus ; abdomen cristatum ; pedes straminei ; alæ anticæ cervinæ, ad discum limpidae, apice truncatæ, margine postico tuberculatæ ; alæ posticæ albæ.

Body straw-colour : head very short ; crown broad and slightly convex in front ; front flat, a little narrower towards the epistoma, rounded on each side, bordered by a rim, straight where it joins the epistoma, with a short ridge which extends along half the length from the crown, and has an impression on each side ; compartment on each side large, very concave ; epistoma slightly convex : fore-chest very convex in front, slightly concave behind, bordered by a rim, its length on each side less than half of that in the middle : middle-chest about four times the length of the fore-chest, with three slight ridges : a cross furrow near the tip : abdomen very pale, obconical, crested, a little longer than the chest ; appendages rather large, of the usual form : legs pale straw-colour : wings broad : fore-wings pale fawn-colour, almost colourless on the disks, truncated at the tips which form somewhat rounded and slightly obtuse angles with the hind borders, the latter are tuberculated along half the length from the base where the tubercles are most numerous and occupy most space ; fore border convex, along it a row of parallel cross-veins of equal length blending with a row of longer veins along the tip, these latter are slightly curved and are mostly forked towards their tips ; the vein which parts them from the discoidal region is much waved ; longitudinal veins rather numerous, ramified ; cross-veins numerous towards the border of the disk : hind-wings white. Length of the body  $3\frac{1}{2}$  lines ; of the wings 12 lines.

a. Para. Presented by J. P. G. Smith, Esq.

## 42. PÆCILOPTERA ANTICA, Fem.

*Flavo-viridis* ; caput perbreve ; thorax carinatus ; mesothorax viridi trivittatus ; abdomen cristatum ; pedes lutei ; alæ anticæ albidovirides, apice truncatæ, margine postico tuberculatæ ; alæ posticæ albæ.

Body yellowish-green : head very short : crown extremely short, apparently almost hidden by the fore-chest ; front flat, a little broader towards the epistoma, pale luteous and slightly rounded on each side, bordered by a rim, very slightly concave where it joins the epistoma, with a middle ridge which extends along three-fourths of

the length; compartment on each side oval, concave; epistoma slightly convex, with oblique streaks on each side: fore-chest with a very obtuse inward angle on the hind border, very convex and bordered by a rim in front, with a middle ridge; its length on each side less than half of that in the middle: middle-chest more than thrice the length of the fore-chest, with three green stripes, the middle one accompanying a ridge: breast luteous: abdomen obconical, crested, pale green and tinged with white above: legs pale luteous: wings broad: fore-wings whitish-green, dilated and tuberculated along more than half the length of the hind border, truncated at the tips which form right angles with the hind borders: veins bright luteous, especially along the fore border towards the base where the whole wing has that hue when not closely inspected: longitudinal veins rather numerous, ramified; cross-veins very numerous over the whole surface; fore border slightly convex, along it a row of oblique parallel cross-veins which are shorter and more apart towards the tip, along which there is a row of similar veins: hind-wings white. Length of the body  $4\frac{1}{2}$  lines; of the wings 12 lines.

a. East India. From Mr. Sowerby's collection.

#### 43. POECILOPTERA LATIFRONS, Fem.

*Lutea, lata, viridi varia; caput breve; thorax carinatus; abdomen cristatum; pedes flavi; tibiae tarsique anteriora ferruginea; alae antice virides, luteo marginatae, apice subrotundatae et fusco notatae; alae posticae albidae.*

Body rather broad, luteous, green here and there: head short, crown not visible, or forming one segment with the front which is short and slightly arched above, flat and vertical on the fore side, slightly rounded on each side, bordered by a rim, very concave where it joins the epistoma, with a middle ridge which extends along the whole length, the breadth on the fore side rather exceeding the length; epistoma convex, with ferruginous oblique stripes on each side, tapering in front: tip of the mouth black; compartment on each side rather small: bristle of the antenna black: fore-chest with a slight middle ridge, convex in front, slightly concave behind, its length in the middle nearly twice that on each side: middle-chest with a longitudinal ridge, full four times the length of the fore-chest; a transverse suture near the tip: abdomen obconical, crested, a little longer than the chest: lower appendages curved upward, concave within, ferruginous at the tips; upper appendage pale green, spindle-shaped, inclosing with the other two a cavity: legs pale yellow; an-

terior shanks and feet ferruginous: wings broad: fore-wings grass-green with luteous borders, slightly rounded at the tips, along which there is a row of short brown streaks; veins white; longitudinal veins ramified, not numerous; cross-veins very numerous, irregular; fore border very convex; no cross-veins along it: hind-wings whitish veins pale green. Length of the body  $3\frac{1}{2}$  lines; of the wings 11 lines.

a. New Orleans. From M. Salle's collection.

#### 44. PECILOPTERA PRASINARIA, Mas.

*Viridis; caput breve, subconicum; abdomen albo-viride; pedes viridi-flavi; alæ anticæ albo-virides, apice rotundatæ, margine postico subtuberculatæ; alæ posticæ albæ.*

Body pale green: head short, slightly conical in front; crown extremely short; front forming above an ascending cone, vertical and slightly convex on the fore side, a little broader towards the epistoma, slightly rounded on each side, bordered by a rim, very slightly concave where it joins the epistoma, with an indistinct middle ridge extending along the whole length which much exceeds the breadth; compartment on each side concave, rather small: antennæ thick: fore-chest as long as the head, slightly arched, longer in the middle than on each side: middle-chest full thrice the length of the fore-chest: abdomen obconical, whitish-green, much powdered with white, a little longer than the chest; appendages large, curved, one of the lower pairs ferruginous: legs pale yellow, tinged with green: wings broad: fore-wings whitish-green, rounded at the tips, dilated and very slightly tuberculate along half the length from the base of the hind border; veins green; longitudinal veins few; cross-veins irregular, very numerous; fore border extremely convex, along it a row of oblique cross-veins many of which are forked, towards the tip they are shorter and more irregular: hind-wings white; veins whitish-green. Length of the body  $3\frac{1}{2}$  lines; of the wings 10 lines.

a. South Africa. Presented by Dr. A. Smith.

#### 45. PECILOPTERA RUFI-FASCIA.

*Rufa, viridi-rictata; caput perbreve; prothorax viridi-fasciatus; mesothorax carinatus; pedes virides; tarsi lutei; alæ anticæ luteo-virides, apice subtruncatæ, margine postico tuberculatæ; alæ posticæ albæ.*

Body grass-green: head pale red, very short; crown very slightly convex in front, shorter in the middle than on each side;

front flat, rounded on each side, bordered by a rim, concave where it joins the epistoma, with three green stripes which are united at both ends, the middle one is accompanied by a ridge; epistoma with oblique streaks on each side; compartment on each side small, bordered by a rim but not concave: antennæ rather long: chest pale red: fore-chest concave behind, almost truncate-conical in front, its length in the middle much exceeding that on each side, adorned with a green middle stripe and on each side with a green band along the fore border: middle-chest full four times the length of the fore-chest, with three green stripes, the middle one accompanied by a ridge: legs very pale green; feet luteous: wings broad: fore-wings very pale green with a luteous tinge along the tips and along the hind borders, almost truncated at the tips, tuberculated and slightly dilated along the hind borders towards the base; veins green, longitudinal veins very numerous; cross-veins not numerous, a band of them near to and parallel with the tip, and a few more in the disk; fore border slightly convex, along it a row of oblique parallel cross-veins blending with those along the tip which are rather longer: hind-wings white. Length of the body  $2\frac{1}{2}$  lines; of the wings 10 lines.

a. St. John's Bluff, East Florida. Presented by E. Doubleday, Esq.

#### 46. PECTILOPTERA PROXIMA, Mas.

*Viridi-flava; caput perbreve; abdomen cristatum; alæ anticae virides, apicè ferè truncate, margine postico tuberculatæ; alæ posticae albæ.*

Body pale yellow, tinged with green: head very short; crown very slightly convex in front, shorter in the middle than on each side; front flat, rounded on each side, bordered by a rim, very slightly concave where it joins the epistoma, with a middle ridge which does not reach the epistoma, a little broader than long; epistoma lengthened in front: tip of the mouth brown: fore-chest arched, longer than the crown, a little longer in the middle than on each side: middle-chest about four times the length of the fore-chest: abdomen obconical, crested, a little longer than the chest; appendages tawny: legs pale yellow, tinged with green: wings broad: fore-wings pale green, almost truncated at the tips which form a slightly obtuse and somewhat rounded angle with the hind border; the latter is tuberculate towards the base; veins green; longitudinal and cross-veins numerous, some of the latter forming two uninterrupted bands near to and parallel with the tip; fore border convex, along it a row of oblique parallel slightly curved cross-veins of nearly

equal length: hind-wings white. Length of the body  $2\frac{1}{2}$  lines; of the wings 2 lines.

a. St. John's Bluff, East Florida. Presented by E. Doubleday, Esq.

#### 47. PŒCILOPTERA QUADRATA.

*Viridi-flava; caput breve viridi subreticulata; thorax carinatus; abdomen albo-flavum, cristatum; pedes albo-flavi; tibiæ tarsique anteriora ferruginea; alæ anticae virides, apice fusco guttatæ, vix rotundatæ; alæ posticae albidae.*

Body pale yellow, tinged with green: head short, slightly reticulated with green; crown concealed or forming one segment with the front, a middle ridge along the whole length; upper part moderately long, with slight short ridge and a tubercle on each side; fore part convex, rounded on each side, bordered by a rim, very concave where it joins the epistoma, broader than long; epistoma very slightly convex, with oblique stripes on each side: tip of the mouth brown: eyes very prominent: fore-chest as long as the head, very slightly concave behind, truncate-conical in front, with a middle ridge, its length on each side full half of that in the middle: middle-chest with a ridge, more than four times the length of the fore-chest, with a rim towards the tip where it is lengthened and pointed: abdomen whitish-yellow, obconical, crested, a little longer than the chest: legs yellowish-white; anterior tibiæ and tarsi ferruginous: wings broad: fore-wings green, hardly rounded at the tips along which there is a row of dark brown linear dots, almost angular at the tips of the hind borders; veins green; longitudinal veins few; cross-veins very numerous, irregular, extending over the whole surface; fore border very convex, without a row of parallel cross-veins: hind-wings whitish. Length of the body 3 lines; of the wings 12 lines.

a. Jamaica. From Mr. Gosse's collection.

#### 48. PŒCILOPTERA ACUMINATA.

*Viridi-flava; caput trigonum, acutum, subascendens; mesothorax tricarinatus; pedes flavi; alæ anticae virides, apice truncatæ, margine postico tuberculatæ; alæ posticae albidae.*

Body pale greenish-yellow: head triangular, pointed, slightly ascending; crown a little broader than long, bordered by a rim, with a middle ridge; front flat, widening towards the epistoma, slightly rounded on each side, bordered by a rim, much longer than broad, very slightly concave where it joins the epistoma, with five ridges,

the inner pair very short, the outer pair slightly curved; epistoma rather long, slightly convex; tip of the mouth brown: fore-chest truncate or angular on each side in front, slightly concave behind, with a ridge in the middle which is not longer than each side: middle-chest with three ridges, more than thrice the length of the fore-chest: abdomen obconical, a little longer than the chest: legs yellow: wings broad: fore-wings pale green, truncated at the tips which form slightly obtuse angles with the hind borders, the latter are tuberculated and slightly dilated towards the base; longitudinal veins green, not numerous: cross-veins tawny, rather numerous: fore border almost straight, along it a row of oblique parallel cross-veins which are shorter and more apart towards the tip: hind-wings whitish. Length of the body 3 lines: of the wings 11 lines.

a. New Holland. Presented by the Haslar Hospital.

#### 49. PENCLOPTERA COMPLANATA, Fem.

*Flava, robusta; caput breve; thorax carinatus; abdomen cristatum; pedes flavi; tibiæ tarsique anteriora fulva; alæ anticae virides, apice rotundatæ et fusco guttatæ; alæ posticæ limpidæ.*

Body yellow, rather short: head short; crown forming with the front one compartment which is short above, has a middle ridge and is bordered by a rim; fore part slightly convex, straight on each side, a little rounded towards the epistoma, broader than long, notched where it joins the epistoma which is short and narrow: fore-chest a little longer than the head, with a middle ridge, bordered by a rim, convex in front, concave behind, longer in the middle than on each side: middle-chest about four times the length of the fore-chest, with a middle ridge: abdomen obconical, crested, a little longer than the chest: legs yellow; anterior shanks and feet tawny: wings broad: fore-wings pale green, rounded at the tips, along which are linear brown dots; tips of the hind borders rounded; veins pale green; longitudinal veins few; cross-veins numerous, irregular, extending over the whole surface; fore border very convex, without a row of parallel cross-veins: hind-wings colourless: veins whitish. Length of the body  $3\frac{1}{2}$  lines; of the wings 10 lines.

a. ——— ?



## 50. PECILOPTERA LATA, Fem.

*Flavo-viridis, lata; caput sat longum, carinatum; mesothorax tricarinatus; abdomen flavum; pedes flavi; tibiæ tarsique anteriora fulva; alæ anticæ virides, apice subtruncatæ et fusco-guttatæ; alæ posticæ limpidae.*

Body rather broad, pale yellowish-green: head moderately long, with a middle ridge, bordered by a rim; fore part flat, a little rounded on each side, narrower towards the epistoma, broader than long, very concave where it joins the epistoma, the latter is small: fore-chest with a middle ridge, as long as the head, very convex in front, hardly concave behind, very much longer in the middle than on each side: middle-chest about thrice the length of the fore-chest, with a middle ridge; an indistinct ridge on each side and a cross furrow near the tip: abdomen obconical, pale yellow, a little longer than the chest: legs yellow; anterior shanks and feet tawny: wings broad: fore-wings pale green, almost truncated at the tips along which there is a row of linear brown dots, tips and hind borders forming right angles which are somewhat rounded; veins pale; longitudinal veins few; cross-veins numerous, irregular, extending over the whole surface; fore border very convex, without a row of parallel cross-veins: hind-wings colourless; veins pale yellow. Length of the body  $2\frac{1}{2}$  lines; of the wings 10 lines.

a.

## 51. PECILOPTERA INCERTA, Fem.

*Fulva; caput perbreve; prothorax flavus; mesothorax fusco maculatus et bivitatus; abdomen piceum; pedes fulvi; alæ anticæ flavæ, apice truncatæ, margine postico tuberculatæ, alæ posticæ limpidae.*

Body tawny: head very short; crown extremely short, bordered by a rim, hardly convex in front, shorter in the middle than on each side; front flat, bordered by a rim, slightly convex on each side, with a short ridge towards the crown, very slightly concave where it joins the epistoma, hardly longer than broad; epistoma short: fore-chest yellow, nearly six times the length of the crown, very convex, slightly concave behind, its length in the middle about twice that on each side; middle-chest about thrice the length of the fore-chest, with some brown spots and two broad brown stripes: abdomen pitchy, a little longer than the chest: legs tawny: fore-wings broad, yellow, truncated at the tips which form slightly obtuse angles with the hind

borders, the latter are tuberculated towards the base; veins tawny; longitudinal veins numerous; cross-veins rather numerous in the disk; fore border convex, along it a row of oblique parallel cross-veins of nearly equal length: hind-wings colourless. Length of the body  $2\frac{1}{2}$  lines; of the wings 9 lines.

a. ——— ?

## 52. PŒCILOPTERA PLANA.

*Flava; caput breve; thorax carinatus; tarsi fulvi; alæ anticæ flavae, apice subtruncatae, margine postico tuberculatae.*

Body yellow: head short; crown very short, much arched, bordered by a rim; front almost flat, broader towards the epistoma, bordered by a rim, much longer than broad, hardly concave where it joins the epistoma, with a middle ridge which extends along three-fourths of the length from the crown; epistoma with oblique ferruginous stripes on each side: fore-chest conical, bordered in front by a rim, with a middle ridge, slightly concave along the hind border, its length in the middle about thrice of that on each side: middle-chest full thrice the length of the fore-chest, with a very slight middle ridge: abdomen wanting: legs yellow; feet tawny: wings broad: fore-wings pale yellow, almost truncated at the tips which form slightly obtuse angles with the hind borders, the latter are tuberculated and slightly dilated towards the base; veins tawny; longitudinal veins rather numerous; cross-veins very numerous, irregular; fore border slightly convex, along it a row of oblique parallel cross-veins which slightly decrease in length towards the tip. Length of the body  $3\frac{1}{2}$  lines; of the wings 13 lines.

a. ——— ?

## 53. PŒCILOPTERA NIVIFERA, Fem.

*Lutea; abdomen cristatum; pedes albo-flavi; tarsi fulvi; alæ anticæ albidae, apice subtruncatae, margine postico tuberculatae; alæ posticæ albæ.*

Body luteous: head wanting: fore-chest short, low, arched: middle-chest more than four times the length of the fore-chest, with a pale stripe on each side: abdomen paler and a little longer than the chest, obconical, crested: legs yellowish white; feet tawny: wings broad: fore-wings whitish, almost truncated at the tips which form a slightly obtuse and somewhat rounded angle with the hind borders, the latter is tuberculated and slightly dilated towards the base; veins tawny; longitudinal veins numerous; cross-veins rather

numerous, irregular in the disk but forming two uninterrupted bands towards each tip with which they are parallel; fore border slightly convex, along it a row of slightly oblique parallel cross-veins of nearly equal length: hind-wings white; veins whitish. Length of the body  $2\frac{1}{2}$  lines; of the wings 9 lines.

a. Rio Janeiro. Presented by J. P. G. Smith, Esq.

#### 54. PŒCILOPTERA HEBES.

*Viridis, depressa, tuberculata; caput conicum, sat longum; pedes flavi; tarsi fulvi; alæ antice virides, apice truncatæ, margine postico tuberculatæ; alæ posticæ albidæ.*

Body pale green: head and thorax flat, tuberculated: head moderately long, crown conical, bordered by a rim in front; front slightly convex, narrower towards the epistoma, bordered by a rim, slightly rounded on each side, almost straight where it joins the epistoma, with a short middle ridge towards the crown, an indistinct slightly oblique ridge on each side: epistoma slightly convex, rather long: fore-chest much longer than the crown, truncated in front, notched behind, much longer in the middle than on each side: middle-chest full thrice the length of the fore-chest: abdomen obconical, a little longer than the chest: legs yellow; feet tawny: wings broad: fore-wings green, truncated at the tips which form right angles with the hind borders, the latter are tuberculated and very slightly dilated towards the base; veins green; longitudinal veins rather numerous; cross-veins numerous, moderately regular; fore border convex, a row of slightly oblique parallel cross-veins along two-thirds of its length from the base: hind-wings whitish. Length of the body  $2\frac{1}{2}$  lines; of the wings 8 lines.

a. New South Wales. From Mr. Pamplin's collection.

#### 55. PŒCILOPTERA SERVA, Fem.

*Sordidè straminea; caput breve; thorax carinatus; alæ antice albidæ, apice truncatæ, margine postico tuberculatæ; alæ posticæ sublimpidæ.*

Body dingy straw-colour: head short; crown and front forming one compartment, which above is short, convex, and conical; fore part flat, nearly linear, a little narrower towards the epistoma, bordered by a slight rim, very much longer than broad, straight where it joins the epistoma, with a middle ridge which extends along half the length from the crown; side compartments large, concave,

irregularly spindle-shaped: second joint of the feelers long, linear: epistoma small, slender towards the tip: fore-chest twice the length of the head, truncate-conical in front, slightly concave behind, its length in the middle nearly thrice that on each side: middle-chest about thrice the length of the fore-chest, with a slight middle ridge: a rim on each side towards the tip, near which there is a cross suture: abdomen obconical, longer than the chest: legs pale dingy straw-colour: wings broad: fore-wings dingy white, truncated along the tips which form acute angles with the hind borders, the latter are tuberculated towards the base; veins pale yellow; longitudinal veins numerous; cross-veins very few; fore border slightly convex, tuberculated at the base, along it a row of parallel cross-veins which towards the tip are more slanting, more apart and mostly shorter: hind-wings almost colourless. Length of the body 3 lines; of the wings 10 lines.

a. Philippine Islands, From Mr. Cuming's collection.

#### 56. PECTILOPTERA UNICOLOR.

*Lutea, subtuberculata: caput breve; tibiæ tarsique rufa; alæ antice luteæ, apice subtruncatæ rufescentes, margine postico tuberculatæ; alæ posticæ albide.*

Body luteous, slightly tuberculated: head short: crown arched, concave behind, reddish and almost conical in front where there is an angle on each side, longer in the middle than on each side; front slightly convex, nearly linear on each side, narrower towards the epistoma, bordered by a very distinct reddish rim, very much longer than broad, concave where it joins the epistoma, with a reddish middle ridge: epistoma small: fore-chest arched, very little longer than the head, rather shorter on each side than in the middle: middle-chest rather more than twice the length of the fore-chest: with a slight cross furrow near the tip: abdomen obconical, a little longer than the chest: legs pale luteous; shanks and feet red: wings broad; fore-wings pale luteous, reddish and almost truncated along the tips which form nearly right but somewhat rounded angles with the hind borders, the tubercles of the latter extend along the whole length but diminish much towards the tips; veins luteous; longitudinal veins rather numerous; cross-veins very numerous; fore border convex, along three-fourths of it a row of oblique parallel veins which are alternate with little tubercles, and there is a row of the latter along the tip: hind-wings whitish. Length of the body  $2\frac{1}{2}$  lines; of the wings 8 lines.

a. New Holland. Presented by the Haslar Hospital.

57. *PECCILOPTERA NANA*, Fem.

*Flavo-viridis, sat lata; caput ferrugineum, sat longum, ad discum flavo-viride; thoracis latera ferruginea; abdomen subcristatum, apice acuminatum et subascendens; pedes fulvi; alae antice virides, ferrugineo submarginatae, apice rotundatae; alae postice limpidae.*

Body pale yellowish-green, rather broad: head ferruginous, moderately long; crown and front forming one compartment, which above is thrice broader than long and has a pale yellowish-green disk; fore part slightly convex, broader and rounded towards the epistoma, not bordered by a rim, a little broader than long, very concave where it joins the epistoma; the latter is small and narrow: fore-chest ferruginous on each side, as long as the head, slightly arched, a little shorter on each side than in the middle: middle-chest about thrice the length of the fore-chest, ferruginous on each side, pointed at the tip where there is a slight cross furrow: abdomen obconical, slightly crested, pointed and a little ascending at the tip, longer than the chest: legs tawny: wings broad: fore-wings pale green, rounded at the tips and between the latter and the hind borders which like the tips are ferruginous; veins pale bluish-green: longitudinal veins few; cross-veins numerous, spread over the whole surface; fore border very convex: hind-wings colourless; veins greenish-white. Length of the body 2 lines; of the wings 6 lines. *a, b.* North America. Presented by the Entomological Club.

58. *PECCILOPTERA ALEULA*.

*Fulva; caput perbreve; alae albae; alae antice apice rotundatae.*

Body pale tawny: head very short; crown forming one compartment with the front; upper part extremely short; fore part slightly convex, a little broader towards the epistoma, rounded on each side, bordered by a rim, longer than broad, straight where it joins the epistoma, with a slight middle ridge along three-fourths of the length from the crown: epistoma rather long: fore-chest arched, a little longer in the middle than on each side: middle-chest darker than the fore-chest and more than thrice its length: abdomen wanting: legs pale tawny: wings broad, white: fore-wings white, rounded along the tips and between the latter and the hind borders; veins pale yellow; longitudinal veins very numerous; cross-veins few, some of them forming a band near to and parallel with each tip; fore border slightly convex, along it a row of oblique parallel cross-

veins of equal length: hind-wings and their veins white. Length of the body  $2\frac{1}{2}$  lines; of the wings 8 lines.

a. ———? Presented by J. G. Children, Esq.

#### 59. PÆCILOPTERA VENUSTA, Mas.

*Flava; caput breve, angustum; alæ albæ.*

Body pale yellow, powdered with white: head short, very narrow, hardly half the breadth of the chest; crown very short; front flat, linear, a little broader towards the epistoma, with a high rim on each side, concave where it joins the epistoma, its length about four times its breadth: epistoma narrow, attenuated; side compartments flat, almost spindle-shaped: feelers subclavate; second joint rather long: fore-chest much shorter than the head, almost straight: middle-chest full four times the length of the fore-chest: abdomen obconical, a little longer than the chest: legs pale yellow: wings broad, white; veins of the fore-wings pale yellow, very few. Length of the body  $1\frac{3}{4}$  lines; of the wings 6 lines.

a. ———?

#### 60. PÆCILOPTERA SOLITA, Fem.

*Fulva; caput longum, subconicum, subforecolatum; alæ antice virides, sat angustæ; alæ posticæ albide.*

Body tawny: head rather long: crown almost conical, forming a thin edge with the front, having a slight furrow across the middle of the disk; front arched, elliptical, slightly concave, straight where it joins the epistoma, bordered by a slight rim; epistoma small, rather narrow: fore-chest arched, shorter than the head: middle-chest full thrice the length of the fore-chest: abdomen obconical, a little longer than the chest: legs pale tawny: wings rather narrow: fore-wings pale green; veins green; longitudinal and cross-veins numerous, the latter undulating; fore border very slightly convex, along it a row of cross-veins of equal length: hind-wings whitish. Length of the body 4 lines; of the wings 10? lines.

a. ———?

#### 61. PÆCILOPTERA PERPUSILLA, Fem.

*Albida; pedes anteriores fulvi; pedes postici albi; alæ antice albo-flavæ; alæ posticæ albæ.*

Body whitish: head and fore-chest wanting: middle-chest not ridged: abdomen obconical, a little longer than the chest: anterior

legs tawny: hind-legs whitish: wings broad: fore-wings yellowish-white; longitudinal veins rather numerous; cross-veins very few; fore border almost straight, along it a row of oblique parallel cross-veins of equal length; hind-wings white. Length of the body  $1\frac{1}{2}$  lines; of the wings 5 lines.

62. PÆCILOPTERA? MARGINATA.

*Cicada marginata*, *Linn. Syst. Nat.* ii. 610, 39.

*C. (Deflexa) marginata*, *Gmel. Ed. Syst. Nat.* i. 4, 2112, 39. *Fabr.*

*Sp. Ins.* ii. 322, 4. *Mant. Ins.* ii. 268, 4. *Ent. Syst.* iv. 29, 11.

*Flata minuta*, *Fabr. Ent. Syst. Suppl.* 519, 12. *Syst. Rhyn.* 52, 36.

West Indies.

63. PÆCILOPTERA? FERRUGATA.

*Flata ferrugata*, *Fabr. Syst. Rhyn.* 50, 19.

Trauquebar.

64. PÆCILOPTERA? VITTATA.

*Flata vittata*, *Fabr. Syst. Rhyn.* 52, 33.

South America.

65. PÆCILOPTERA PULVERULENTA?

*Pæcilopectera pulverulenta?* *Guér. Icon. Règ. Anim. Texte*, 361.

Ceylon. Presented by Dr. Hooker.

66. PÆCILOPTERA? QUADRIPUNCTATA.

*Cicada quadripunctata*, *Fabr. Ent. Syst.* iv. 30, 14.

*Flata quadripunctata*, *Fabr. Syst. Rhyn.* 53, 38.

West Indies.

67. PÆCILOPTERA? RELICTA.

*Flata relictæ*, *Fabr. Syst. Rhyn.* 52, 32.

Carolina.

## 68. PÆCILOPTERA? RETUSA.

*Cicada retusa*, *Fabr. Ent. Syst.* iv. 28, 7.

*Flata retusa*, *Fabr. Ent. Syst. Suppl.* 518, 8. *Syst. Rhyn.* 50, 23.

Cayenne.

## 69. PÆCILOPTERA? PYRALINA.

*Pæcilopectera pyralina*, *Germ. Mag. Ent.* iv. 114, 7.

## 70. PÆCILOPTERA? PRUINOSA.

*Flata pruinosa*, *Say, Journ. Acad. Philad.* vi. 237.

United States.

## 71. PÆCILOPTERA? BIVITTATA.

*Flata bivittata*, *Say, Journ. Acad. Philad.* vi. 335, 1.

United States.

## 72. PÆCILOPTERA? STIGMATA.

*Flata stigmata*, *Say, Journ. Acad. Philad.* iv. 336.

United States.

## 73. PÆCILOPTERA? NÆVA.

*Flata næva*, *Say, Journ. Acad. Philad.* vi. 238.

United States.

## 74. PÆCILOPTERA? OPACA.

*Flata opaca*, *Say, Journ. Acad. Philad.* vi. 59.

United States.

## 75. PÆCILOPTERA? PALLIDA.

*Flata pallida*, *Say, Journ. Acad. Philad.* vi. 51.

United States.



## 76. PÆCILOPTERA? BULLATA.

Flata bullata, *Say, Journ. Acad. Philad.* vi. 52.

United States.

## 77. PÆCILOPTERA? QUINQUELINEATA.

Flata quinquelineata, *Say, Journ. Acad. Philad.* vi. 53.

United States.

## 78. PÆCILOPTERA? HUMILIS.

Flata humilis, *Say, Journ. Acad. Philad.* vi. 54.

United States.

## 79. PÆCILOPTERA? SUBQUADRATA.

Pæciloptera subquadrata, *Fricwaldsky, MSS. Herr.-Schäff. Faun.*

*Germ. Fasc.* 134, f. 2, 3. *Spin. Ann. Soc. Ent. Fr.* viii. 426, 4.

Hypotinetus, *Amyot, Ann. Soc. Ent. Fr. 2<sup>ne</sup> Série*, 408.

Roumelia.

## 80. PÆCILOPTERA? HERBIDA, Fern.

*Viridis; caput flavum, perbreve; abdomen flavum; pedes flavi, breves; alæ anticæ virides, sat augustæ, fusco maculatæ, apice rotundatæ, basi tuberculatæ; alæ posticæ albide.*

Body green: head yellow, very short; crown arched, longer on each side than in the middle; front flat, a little narrower towards the epistoma, rounded on each side, bordered by a slight rim, straight where it joins the epistoma, much broader than long, with a middle ridge which extends along half the length from the crown; epistoma triangular, not longer than broad: fore-chest concave behind, almost conical in front; its length in the middle about twice that on each side: middle-chest longer than the fore-chest, almost conical in front, concave behind, much shorter on each side than in the middle: abdomen pale yellow, obconical, a little longer than the chest: legs pale yellow, short: fore-wings green, rather narrow, rounded at the tips, tuberculated towards the base, with a few brown spots in the disk and towards the tips and along the hind border, and with an indistinct brown dot in each arcole; veins green; longitudinal veins and cross-veins very numerous; fore border convex, along it a

row of oblique parallel cross-veins: hind-wings whitish. Length of the body  $1\frac{1}{2}$  lines; of the wings 5 lines.

a. Jamaica. From Mr. Gosse's collection.

## Genus 12. ACANALONIA.

*Acanalonia Spin. Ann. Soc. Ent. Fr.* viii. 447.

### 1. ACANALONIA SERVILLEI.

*Acanonia, Amyot et Serville.*

*Acanalonia Servillei, Spin. Ann. Soc. Ent. Fr.* viii. 448, pl. 16, f. 2.

*Acanonia Servillei, Amyot et Serr. Hist. Nat. Hém.* 520, 1.

Philadelphia.

## Fam. III. TETTIGOMETRIDES.

### Tribe PLANIGENI.

*Planigeni, Amyot et Serr. Hist. Nat. Hém.* 530.

*Tettigometrides, Amyot et Serr. Hist. Nat. Hém.* 530.

*Fulgora, Burmeister (ad partem.)*

## Genus 1. TETTIGOMETRA

*Tettigometra, Latr. Hist. Nat. Ins.* xii. 312.

*Fulgora, Panzer (ad partem.)*

### 1. TETTIGOMETRA VIRESCENS.

*Tettigometra virescens, Latr. Hist. Nat. Ins.* xii. 312. *Gen. Crust.* iii. 161, 1. *Burm. Handb. Ent.* ii. 1, 147, 1. *Blanch. Hist. Nat. Ins.* iii. 178, 1. *Guérin, Icon. Rég. An. Ins.* pl. 58, f. 9. *Amyot et Serr. Hist. Nat. Hém.* 531, 1. *Crochard, Ed. Règne Anim. Ins.* pl. 97, f. 4.

*Fulgora virescens, Panz. Faun. Germ.* 61, f. 12.

*Tettigometra, Amyot, Ann. Soc. Ent. Fr. 2me Série,* v. 178, 409.

Europe.

## 2. TETTIGOMETRA UMBROSA.

*Tettigometra umbrosa*, *Germ. Mag. Ent.* iv. 7, 3.  
Europe.

## 3. TETTIGOMETRA PICCOLA.

*Tettigometra piccola*, *Klug, Burm. Handb. Ent.* ii. 1, 147, 3.  
Europe.

## 4. TETTIGOMETRA OBLIQUA.

*Tettigometra obliqua*, *Burm. Handb. Ent.* ii. 1, 147, 2. *Duf. Ann. Soc. Ent. Fr. 2me Série*, iv. *Bull. Ent.* 45.  
*Fulgora obliqua*, *Panz. Faun. Germ. fasc.* 61, f. 13.  
*Epiplagia* (Vars. *controbliqua*, *obliqua*, *subobliqua*), *Amyot, Ann. Soc. Ent. Fr. 2me Série*, v. 179, 411.  
Europe.

## 5. TETTIGOMETRA IMPRESSO-PUNCTATA.

*Tettigometra impresso-punctata*, *Duf. Ann. Soc. Ent. Fr. 2me Série*, iv. *Bull. Ent.* 47.  
France.

## 6. TETTIGONIA ATRA.

*Tettigonia atra*, *Hagenbach, Synb. Faun. Ins. Helvet.*  
Switzerland.

## Fam. IV. MEMBRACINA.

*Membracides*, *Latr.*

*Membracina*, *Burm. Handb. Ent.* ii. 1, 126.

Fam. Antericornes, *Amyot et Serr. Hist. Nat. Hém.* 531 (ad partem.)

Trib. Cornidorsi *Amyot et Serr. Hist. Nat. Hém.* 532.

Stirps 1. Tectiscuti, *Amyot et Serr. Hist. Nat. Hém.* 532.

Group 1. *Membracides*, *Amyot et Serr. Hist. Nat. Hém.* 533.

Group 2. *Hoplophorides*, *Amyot et Serr. Hist. Nat. Hém.* 537.

Group 3. *Darnides*, *Amyot et Serr. Hist. Nat. Hém.* 544.

Group 4. *Combophorides*, *Amyot et Serr. Hist. Nat. Hém.* 546.

Stirps 2. *Nudiscuti*, *Amyot et Serr. Hist. Nat. Hém.* 549.

Group 1. Centrotides, *Amyot et Serv. Hist. Nat. Hém.* 549.

Group 2. Bocyldides, *Amyot et Serv. Hist. Nat. Hém.* 551.

### Genus 1. XEROPHYLLUM.

*Xerophyllum*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 242.

#### 1. XEROPHYLLUM SERVILLEI.

*Xerophyllum* Servillei, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 242, pl. 4, f. 10—12.

### Genus 2. MEMBRACIS.

*Membracis*, *Fabr., Oliv., Tigu., Germ., Burn., Blanch., Westw., Amyot et Serv.*

*Cicada*, *Linn., Deg., Stoll, Gronov., Merian, Fabr., Gmel., Fairm.*

*Membracis foliaceæ*, *Fabr., Burn.*

#### 1. MEMBRACIS FUSCA.

*Membracis fusca*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 244, 1.

*Cicada fusca*, *Deg. Ins.* iii. 208, 10, pl. 32, f. 14. *Deg. ed. Retz.* 80, 374.

*Membracis aurata*, *Fabr. Syst. Rhyn.* 8, 10.

a. Brazil. Presented by the Entomological Club.

#### 2. MEMBRACIS CARINATA.

*Membracis carinata*, *Fabr. Syst. Rhyn.* 8, 8. *Germ. Silb. Rev. Ent.*

iii. 224, 2. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 244, 2.

a. Para. From Mr. Stevens' collection.

#### 3. MEMBRACIS LUNATA.

*Membracis lunata*, *Fabr. Mant. Ins.* ii. 262, 6. *Ent. Syst.* iv. 9, 5.

*Syst. Rhyn.* 8, 11. *Stoll, Cic.* i. 33, pl. 5, f. 24. *Germ. Silb.*

*Rev. Ent.* iii. 224, 5. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 244, 3.

*Membracis foliata*, *Oliv. Enc. Méth.* vii. 662, 3.

a. Brazil. From Mr. Children's collection.

b. Brazil. From Mr. Walker's collection.

c—e. Brazil

## 4. MEMBRACIS C.-ALBUM.

*Membracis C.-album*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 244, 4.

*Cicada foliata fasciata*, *Deg. Ins.* iii. 205, 8, pl. 32, f. 9, 10.

*Membracis lunata*, var. *Fabr.*

*Membracis foliata*, *Oliv. Enc. Méth.* vii. 662, 3. *Germ. Silb. Rev. Ent.* iii. 224, 4.

a.—c. British Guiana. Presented by Sir R. Schomburgke.

d. Columbia. From Mr. Pamplin's collection.

e. Venezuela. From Mr. Dyson's collection.

f, g. ——— ?

## 5. MEMBRACIS FOLIATA.

*Membracis foliata*, *Fabr. Ent. Syst.* iv. 9, 4. *Syst. Rhyn.* 7, 7.

*Burm. Handb. Ent.* ii. 1, 136, 4. *Amoyot et Serv. Hist. Nat.*

*Hém.* 534. *Westw. Duncan's Nat. Libr.* i. 285, pl. 24, f. 2.

*Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 245, 5, pl. 4, f. 21.

*Crochard, Ed. Règne Anim. Ins.* pl. 98, f. 1.

*Cicada foliata*, *Linn. Syst. Nat.* ii. 705, 2. *Deg. Ins.* iii. 205, 8, pl.

32, f. 9, 10. *Stoll, Cic.* i. pl. 1, f. 2. *Gronov. Zooph.* 677. *Merian,*

*Ins. Surin.* pl. 5, f. ult. *Fabr. Sp. Ins.* ii. 316, 3. *Gmel. Ed.*

*Syst. Nat.* i. 3, 2092, 2.

*Membracis lunata*, *Fabr. Mant. Ins.* 262, 5.

*Membracis flaveola*, *Germ. Silb. Rev. Ent.* iii. 224.

a. Brazil. From Mr. Stevens' collection.

b. Para. From Mr. Stevens' collection.

## 6. MEMBRACIS TRIMACULATA.

*Membracis trimaculata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 245, 6, pl. 4, f. 14.

New Grenada.

## 7. MEMBRACIS PERIPHÆRIA.

*Membracis periphæria*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 245, 7, pl. 4, f. 15.

Cayenne.

## 8. MEMBRACIS EXPANSA.

*Nigra; prothorax flavo-trifasciatus; fascia 1a marginem anticum occupans, posticè subarcuatus; 2a ferè erecta, paullo antemedià, ad carinam subdilatata, basi dilatata; 3a apicalis, 2e dimidiata rix latitudine, basi dilatata et 2a connexa; pectus et abdomen picea.*

Black: fore-chest with three pale yellow bands; the first occupying the fore border, and extending thence to the eye, its hind side very slightly curved; second nearly upright, a little in advance of the middle of the fore-chest, slightly widened backwards on the fore border, more widened at its base; third occupying the tip, hardly half the length of the second, widening towards its base, where it is connected with that of the second by means of a pale yellow stripe along the inner side of the fore-chest: breast and abdomen pitchy. Length of the body  $6\frac{1}{2}$  lines; of the wings  $11\frac{1}{2}$  lines.

a. Venezuela, From Mr. Dyson's collection.

## 9. MEMBRACIS CELSA.

*Nigra; prothorax flavo-trifasciatus; fasciæ angustæ; fascia 1a marginem anticum occupans, posticè subarcuata; 2a erecta, paullo antemedià, basi subdilatata et 3a connexa; 3a propè apicem, obliqua, ad carinam dilatata; pectus et abdomen picea.*

Black: fore-chest with three narrow pale yellow bands; the first occupying the fore border and extending thence nearly to the eye, its hind side very slightly curved; second upright, before the middle of the fore-chest, slightly widened towards the base, joined by a broad pale yellow stripe with the third which is oblique, near the tip, and widens towards the upper side: breast and abdomen pitchy. Length of the body  $4\frac{1}{2}$  lines; of the wings 9 lines.

a. Brazil.

## 10. MEMBRACIS SURGENS.

*Nigra; prothorax flavo-trifasciatus; fascia 1a marginem anticum occupans, posticè recta; 2a ferè erecta, paullo antemedià, e vertice dilatans, 3a basi connexa; 3a lata, apicalis, antice connexa; pectus et abdomen picea.*

Black: fore-chest lower than those of the two preceding species, with three pale yellow bands; the first occupying the fore border and extending thence to the eye; its hind side straight;

second nearly upright, a little in advance of the middle of the fore-chest, widening much from the ridge to the lower side, joined by a rather broad pale yellow stripe with the third which is broad, occupies the tip, and is concave along the fore side: breast and abdomen pitchy. Length of the body  $5\frac{1}{2}$  lines; of the wings 10 lines.

a. Brazil.

#### 11. MEMBRACIS ALTA.

*Nigra; prothorax albo-bifasciatus; fascia 1a angusta, marginem anticum occupans, anticè subcurva; 2a lata, brevis ferè apicalis, anticè undulata; abdomen piecum.*

Black, thinly clothed with pale down: fore-chest very high, more conical than those of all the preceding species, with two white bands; the first narrow, occupying the fore border, and extending thence half-way to the eye; its fore side slightly curved; second broad and short, occupying the tip, excepting the acute angle of the latter which is black; its fore side undulating; abdomen pitchy: fore-wings blackish; veins tawny: hind-wings colourless; veins black. Length of the body 4 lines; of the wings 9 lines.

a. Venezuela. From Mr. Dyson's collection.

#### 12. MEMBRACIS FASCIATA.

*Membracis fasciata, Fabr. Mant. Ins. ii. 262, 6. Ent. Syst. iv. 9, 6. Syst. Rhyn. 9, 16. Gmel. Ed. Syst. Nat. ii. 2092, 54. Oliv. Enc. Méth. vii. 662, 5. Germ. Silb. Rev. Ent. iii. 225, 6. Fairm. Ann. Soc. Ent. Fr. 2me Série, iv. 215, 8.*

*Membracis cucullata, Amyot et Serr. Hist. Nat. Hém. 534, pl. 1, f. 2.*

a. Interior of Brazil. Presented by the Entomological Club.

b. Para. From Mr. Stevens' collection.

#### 13. MEMBRACIS ROSEA.

*Membracis rosea, Fairm. Ann. Soc. Ent. Fr. 2me Série, iv. 246, 9, pl. 4, f. 24.*

a. Brazil. From Mr. Parzudaki's collection.

b. Brazil. From Mr. Mornay's collection.

## 14. MEMBRACIS LEFEBVREI.

*Membracis Lefebvrei*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 246, 10.

*a.* Brazil. From Mr. Mornay's collection.

## 15. MEMBRACIS TECTIGERA.

*Membracis tectigera*, *Oliv. Enc. Méth.* vii. 668, 8. *Stoll, Cic.* 58, pl. 14, f. 71. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 246, 11.

*M. elevata*, *Fabr. Syst. Rhyn.* 8, 9. *Germ. Silb. Rec. Ent.* iii. 225, 7.

*M. fuscata*, *Cog. Ill. Icon.* pl. 18, f. 1.

*a—c.* Brazil. Presented by John Miers, Esq.

*d.* Brazil. Presented by J. C. Bowring, Esq.

*e.* Venezuela. From Mr. Dyson's collection.

*f.* ———? From Mr. Children's collection.

*g.* Brazil.

*h.* ———?

## 16. MEMBRACIS FUSCATA.

*Membracis fuscata*, *Fabr. Syst. Rhyn.* 9, 15. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 247, 12.

Brazil?

## 17. MEMBRACIS NIGRA.

*Membracis nigra*, *Oliv. Enc. Méth.* vii. 668, 4. *Stoll, Cic.* pl. 17, f. 92. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 247, 13.

*M. compressa*, *Fabr. Syst. Rhyn.* 9, 14. *Germ. Silb. Rec. Ent.* iii. 225, 8.

*a.* Brazil.

## 18. MEMBRACIS CONFUSA.

*Membracis confusa*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 247, 14, pl. 4, f. 23.

Brazil.



## 19. MEMBRACIS ARCUATA.

*Membracis arcuata*, *Oliv. Enc. Méth.* vii. 664, 14. *Germ. Silb. Rev. Ent.* iii. 224, 1. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 247, 15.

*Cicada arcuata*, *Deg. Ins.* iii. 206, 9, pl. 32, f. 10. *Deg. Retz.* 80, 373. *Gmel. Ed. Syst. Nat.* 2094, 60.

*Membracis dorsata*, *Fabr. Syst. Rhyn.* ii. 26.

Brazil.

## 20. MEMBRACIS MALLEONOTATA.

*Membracis malleonotata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 247, 16.

Brazil.

## 21. MEMBRACIS ZONATA.

*Membracis zonata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 248, 17, pl. 4, f. 16—19.

Brazil.

## 22. MEMBRACIS CINGULATA.

*Membracis cingulata*, *Germ. Silb. Rev. Ent.* iii. 307. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 248, 18.

Brazil.

## 23. MEMBRACIS MEXICANA.

*Membracis mexicana*, *Guér. Icon. Règ. Anim. Texte*, 364. *Ins.* pl. 59, f. 1. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 248, 19.

*a.* Mexico. Presented by the Entomological Club.

*b.* Honduras. From Mr. Dyson's collection.

## 24. MEMBRACIS STOLIDA.

*Membracis stolidia*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 248, 20.

Mexico.

## 25. MEMBRACIS PERUVIANA.

*Membracis Peruviana*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 249, 21, pl. 4, f. 26.

Chili? Peru?

## 26. MEMBRACIS INTERMEDIA.

*Membracis intermedia*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 249, 22.

Brazil.

## 27. MEMBRACIS TRICOLOR.

*Membracis tricolor*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 249, 23.

Columbia.

## 28. MEMBRACIS AMBIGUA.

*Membracis ambigua*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 249, 24.

Cayenne.

## 29. MEMBRACIS MARGINALIS, Fem.

*Fusco-testacea*; *prothorax convexus, supra caput projectus, anticæ conicus, subobtusus.*

Dark testaceous: fore-chest minutely punctured, reticulated with ferruginous veins, forming a very thin keel, slightly convex along the back, produced in front of the head into a horizontal cone which has a slightly obtuse tip, and is full half the length of the hind part; the latter extends a little beyond the tip of the abdomen, and terminates in an acute tip: tibiæ slightly dilated: wings testaceous: fore-wings punctured along one-third of the length from the base and along two-thirds of the fore border. Length of the body 3 lines; of the wings  $6\frac{1}{2}$  lines.

a. Para. From Mr. Stevens' collection.

## 30. MEMBRACIS ———? Pupa.

*Alba, pilosa*; *abdomen spinis nigris biserialim armatum*; *pedes nigri.*

Snow-white, compressed, very hairy: ridge of the fore-chest slightly conical, blunt: abdomen very convex, not covered by the

chest, armed with double rows of long black hairy nearly perpendicular but slightly diverging and radiating black spines; six in each row: legs black, powdered with white: wings white, rudimentary. Length of the body 2 lines.

*a.* Brazil. From Mr. Shuckard's collection.

### Genus 3. ENCHOPHYLLUM.

*Membracis*, *Fabr., Germ., Burm., Fairm.*

*M. foliaceo-ensata*, *Burm. Handb. Ent.* ii. 1, 135.

*Enchophyllum*, *Amyot et Serv. Hist. Nat. Hém.* 534, 424.

#### 1. ENCHOPHYLLUM CRUENTATUM.

*Enchophyllum cruentatum*, *Amyot et Serv. Hist. Nat. Hém.* 534, pl. 9, f. 3.

*Membracis cruentata*, *Germ. Silb. Rev. Ent.* iii. 226, 11. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 250, 25.

*a.* Brazil. Presented by John Miers, Esq.

*b.* Brazil. From Mr. Mornay's collection.

#### 2. ENCHOPHYLLUM ENSATUM.

*Membracis ensata*, *Coq. Ill.* ii. pl. 18, f. 2. *Fabr. Syst. Rhyn.* 12, 28. *Burm. Handb. Ent.* ii. 1, 136, 3. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 250, 26.

Brazil.

#### 3. ENCHOPHYLLUM QUINQUE-MACULATUM.

*Membracis quinque-maculata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 250, pl. 4, f. 27.

Brazil.

#### 4. ENCHOPHYLLUM SQUAMIGERUM.

*Cicada squamigera*, *Lin. Syst. Nat.* ii. 705, 4. *Dry. Ins.* iii. pl. 32, f. 17, 18.

*Membracis squamigera*, *Fabr. Syst. Rhyn.* 10, 21.

S. America.

## 5. ENCHOPHYLLUM GLADIUS.

*Membracis gladius*, *Fabr. Syst. Rhyn.* 13, 30.

S. America.

## Genus 4. ENCHENOPA.

*Cicada* *Fabr. Gmel.*

*Membracis*, *Fabr., Coq., Oliv., Latr., Germ., Burm., Say, Fairm.*

*M. ensatæ*, *Fabr., Burm.*

*M. caripatæ*, *Germ.*

*Enchenopa*, *Amyot et Serr. Hist. Nat. Hém.* 535, 425.

## 1. ENCHENOPA LANCEOLATA.

*Membracis lanceolata*, *Fabr. Ent. Syst.* iv. 16, 19. *Syst. Rhyn.* 13, 32. *Coq. Ill.* ii. pl. 18, f. 3. *Stoll, Cic.* pl. 28, f. 66. *Oliv. Enc. Méth.* 664, 19. *Latr. Voy. Humb.* 169, pl. 16, f. 11. *Germ. Mag. Ent.* ii. 114, 21. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 251, 28.

*Cicada lanceolata*, *Fabr. Mant. Ins.* ii. 263, 10. *Gmel. Ed. Syst. Nat.* i. 3, 2094, 65.

*Membracis longicollum*, *Oliv. Enc. Méth.* vii. 667.

*a, b.* Columbia. From Mr. Turner's collection.

## 2. ENCHENOPA BINOTATA.

*Membracis binotata*, *Say, Narr. Exped. Appendic.* 301. *Journ. Nat. Sci. Philad. Germ. Silb. Rev. Ent.* iii. 226, 10. *Harris, Ins. New Engl.* 181. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 251, 29.

*a.* United States. Presented by the Entomological Club.

*b.* New York.

## 3. ENCHENOPA ALBIDORSA.

*Membracis albidorsa*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 251, 30, pl. 4, f. 29.

Brazil.

## 4. ENCHENOPA FULICA.

*Membracis fulica*, *Germ. Silb. Rev. Ent.* iii. 225, 9. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 251, pl. 4, f. 28.

a. Brazil. Presented by J. C. Bowring, Esq.

## 5. ENCHENOPA LATIPES.

*Membracis latipes*, *Say, Narr. Exped. Append. Journ. Acad. Nat. Sci. Philad. Germ. Silb. Rev. Ent.* iii. 227, 13. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 252, 32.

Pennsylvania.

## 6. ENCHENOPA NUTANS.

*Membracis nutans*, *Germ. Mag. Ent.* iv. 28, 30. *Silb. Rev. Ent.* iii. 227, 14. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 252, 33.

Brazil.

## 7. ENCHENOPA ALTISSIMA.

*Membracis altissima*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 252, 34, pl. 4, f. 31.

Columbia.

## 8. ENCHENOPA MINANS.

*Membracis minans*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 252, 35, pl. 4, f. 32.

Mexico.

## 9. ENCHENOPA GRACILIS.

*Membracis gracilis*, *Germ. Mag. Ent.* iv. 29, 31. *Silb. Rev. Ent.* iii. 227, 15. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 253, 36.

Brazil.

## 10. ENCHENOPA CONCOLOR.

*Membracis concolor*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 253, 37, pl. 4, f. 30.

Brazil.

## 11. ENCHENOPA MONOCEROS.

- Enchenopa monoceros*, *Amoyot et Serr. Hist. Nat. Hém.* 535, 425, 1.  
*Membracis monoceros*, *Germ. Mag. Ent.* iv. 28, 29. *Silb. Rev. Ent.*  
 iii. 226, 12. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 253, 38.  
*a, b.* Brazil. Presented by John Miers, Esq.  
*c.* ——— ?

## 12. ENCHENOPA TRUNCATA.

- Membracis truncata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 253,  
 39.  
 Buenos Ayres.

## 13. ENCHENOPA MACULOSA.

- Membracis maculosa*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 254,  
 40.  
 Brazil.

## 14. ENCHENOPA DECIPIENS.

- Membracis decipiens*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 254,  
 41, pl. 4, fig. 33.  
 Brazil.

## 15. ENCHENOPA TRICOSTATA.

- Membracis tricolorata*, *Germ. Mag. Ent.* iv. 24, 24. *Silb. Rev. Ent.*  
 iii. 228, 16. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 254, 42.  
 Brazil.

## 16. ENCHENOPA OPHTHALMICA.

- Membracis ophthalmica*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv.  
 25, 43.  
 Columbia.

## 17. ENCHENOPA NIGROVITTATA.

- Membracis nigrovittata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv.  
 255, 44, pl. 4, f. 36.  
 Cayenne.

## 18. ENCHENOPA LUCONICA.

Membracis Luconica, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv, 255, 45.

Philippine Islands.

## 19. ENCHENOPA SANGUINOLENTA.

Membracis sanguinolenta, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv, 255, 46.

Cayenne.

## 20. ENCHENOPA BICRISTATA.

Membracis bicristata, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv, 256, 47, pl. 4, f. 35.

Brazil.

## 21. ENCHENOPA PÆCILA.

Membracis pæcila, *Germ. Mag. Ent.* iv, 24, 23. *Silb. Rev. Ent.* iii, 228, 17. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv, 256, 48.

Brazil.

## 22. ENCHENOPA TORVA.

Membracis torva, *Germ. Silb. Rev. Ent.* iii, 228, 18. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv, 256, 49.

Brazil.

## 23. ENCHENOPA CARBONARIA.

Membracis carbonaria, *Germ. Silb. Rev. Ent.* iii, 228, 19. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv, 257, 50.

Brazil.

## 24. ENCHENOPA

Membracis monstrosa, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv, 257, 51.

Brazil.

## 25. ENCHENOPA? XIPHIAS.

*Membracis xiphias*, *Fabr. Syst. Rhyn.* 12, 29.

S. America.

## 26. ENCHENOPA FISSA, Fern.

*Picea*; *prothoracis carina undulata, anticè fissa et furcata*; *posticè attenuata*; *abdomen rufum*; *pedes picei*; *tarsi fulvi*; *alæ anticæ ad apices maculis duabus magnis trigonis costalibus ornate*.

Pitchy: fore-chest punctured; upper side forming an undulating ridge which in front is divided into two ridges, each of which accompanies one of the forks into which the tip is divided; under side broader, slightly undulating, with three very minute ridges; an indistinct ridge along each flank: hind part attenuated into a long horn which extends over part of the wings: abdomen red: legs pitchy; feet tawny: fore-wings pitchy, punctured towards the base, reddish beneath, with a very large triangular colourless spot near the tip of the fore border; fore border slightly convex; veins pitchy, yellow in the colourless part: hind wings colourless. Length of the body 3 lines; of the wings 6 lines.

a. Brazil. From Mr. Shuckard's collection.

## 27. ENCHENOPA SUBTRIGONA, Mas.

*Nigra*; *prothoracis carina anticè alta suberecta*, *maculis duabus magnis subtrigonis flavis utrinque ornata*, *posticè attenuata*; *tarsi fulvi*; *alæ posticæ cinereæ*.

Black: front of the head punctured, conical: fore-chest punctured, edged in front and along its upper side, almost perpendicular and slightly convex in front, hardly extending beyond the head, above which it has the greatest depth, tapering thence to its tip beyond three-fourths of the length of the fore-wings; between the fore edge and the upper edge are five or six slight diverging ridges; the upper ridge is slightly undulated, and along it on each side are two large, nearly triangular pale yellow spots: legs black, tarsi tawny: fore-wings black, punctured towards the base; fore border slightly convex; hind border straight for half the length, then slightly widening, and again inclined inward towards the tip: hind-wings gray. Length of the body 2 lines; of the wings 5 lines.

a. Venezuela. From Mr. Dyson's collection.



28. *ENCHENOPA LONGA*, Fem.

*Nigra; prothoracis carina subundulata, ante caput porrecta, anticè ascendens et flavo vittata, posticè flavo interruptè vittata; tarsi fulvi; alæ anticæ longæ; alæ posticæ cineræ.*

Black: fore-chest punctured, edged in front and along the upper side, straight, ascending obliquely and inclined forward in front to some length in front of the head, with a pale yellow stripe on its edge along more than half the length from the head; three short diverging ridges between the fore edge and the upper edge; upper edge very slightly undulating, extending a little beyond half the length of the fore-wings, with two pale yellow stripes, the first long, widening towards the second which is short: legs black; feet tawny: fore-wings black, long, punctured towards the base; fore border slightly convex; hind border straight for half the length, then widening and again inclined inward towards the tip: hind wings gray. Length of the body 4 lines; of the wings 10 lines.

*a.* Brazil. Presented by John Miers, Esq.

29. *ENCHENOPA GALEATA*, Fem.

*Picea; prothoracis carina alta, ad marginem ferruginea, anticè erecta cucullata, supra undulata; pedes ferruginei; alæ anticæ basi ad apices dilatatæ, ferrugineo guttatæ, apice obliquè sub-truncatæ.*

Pitchy: front of the head nearly round, with a ferruginous spot on each side of its fore border: fore-chest punctured, very deep, hardly extending in front of the head, edged in front and along the upper side; fore side ferruginous, perpendicular till near the top where it forms an obtuse angle for a short space forward; upper side mostly ferruginous along the ridge, with three undulations, the first above the head deep and resembling a crest, the second and third more shallow; under side nearly straight, extending nearly to the tips of the fore-wings where it forms an acute angle with the upper side: legs ferruginous: fore-wings pitchy, very broad, adorned with numerous irregular ferruginous dots, widening from the base till near the tips, where they are oblique, slightly convex and almost truncated; fore border convex; hind border straight. Length of the body 3 lines; of the wings  $6\frac{1}{2}$  lines.

*a.* Para. From Mr. Stevens' collection.

## 30. ENCHENOPA SCENICA, Mas et Fem.

*Nigra; prothorax subundulatus, anticè rufo maculatus et flavo birittatus, supra cornu porrecto armatus, posticè attenuatus flavoque fasciatus; abdomen basi rufum; tarsi fulvi.*

Black: head punctured; front obtusely angular on each side, very concave in front where it joins the epistoma, its length in the middle about one-third of its breadth; epistoma nearly round, rather broader than long: fore-chest punctured, edged in front and along the upper side; fore side adorned with a brilliant red oblong spot, perpendicular, slightly convex and hardly advancing in front of the head till near the top, where it is prolonged into a slender slightly curved horn whose length is about equal to half the depth in front of the head, it has on each flank a slight ridge parallel to its concave under side; on each side of the red spot there is a large pale yellow stripe which becomes very narrow at the base of each wing and again widens towards the breast; upper side very slightly undulating; fore-chest tapering hindward to the tip of the abdomen, where it forms a very acute point near which there is a broad pale yellow band; under side straight: abdomen red or ferruginous towards the base; legs black; tarsi tawny: fore-wings blackish, lanceolate, slightly punctured towards the base; fore border convex; hind border straight till near the tip where it is convex: hind-wings colourless; veins black. Length of the body  $2\frac{1}{2}$ —3 lines; of the wings 6—7 lines.

a. Rio Janciro. Presented by H. G. Harrington, Esq.

b. Columbia. From Mr. Turner's collection.

## 31. ENCHENOPA BICUSPIS, Fem.

*Nigra; prothorax marginatus, cornu porrecto subascendente armatus, posticè attenuatus apicè ferrugineus; tarsi picci; alae antice nigricantes, apice luride.*

Body black: head punctured; front and epistoma surrounded by a rim; front with a slight middle furrow, very concave where it joins the epistoma, its length in the middle rather less than half its breadth; epistoma nearly round: fore-chest punctured, edged in front and along the upper side, prolonged into a slender, very slightly ascending pointed horn which is about twice the depth of the fore-chest above the head; on each flank of the horn are four ridges, the upper one extends to the lower border of the fore-chest at some length behind the base of the fore-wing; the other three

are much shorter, the second is curved, and the fourth is very short; fore-chest tapering backward beyond the tip of the abdomen, very slender towards its tip which is ferruginous; upper side and lower side of the hind horn nearly straight: legs black; tarsi pitchy: fore-wings lanceolate, blackish, slightly punctured towards the base, lurid towards the tips; fore border slightly convex; hind border straight till near the tip where it is slightly convex. Length of the body  $4\frac{1}{2}$  lines; of the wings 8 lines.

### 32. ENCHENOPA ANTONINA, Mas.

*Nigra; prothorax ferrugineo marginatus, cornu porrecto compresso subcurvo non ascendente armatus, posticè attenuatus; tarsi lutei; alæ antice fuscae, apice luridae.*

Body black: head punctured; front widening towards the mouth, concave to half its length where it joins the epistoma, its length in the middle about half its breadth; epistoma almost triangular; fore-chest punctured, with a ferruginous edge in front and along the upper side, prolonged into a horizontal, slightly curved, compressed pointed horn whose length much exceeds the depth of the fore-chest above the head; on each flank of the horn are four ridges, the upper one extends to the lower border of the fore-chest near the tip, the other three are short and successively more indistinct; fore-chest tapering backward nearly to the tip of the abdomen, very slender towards the tip which is pointed; upper side and lower side of the hind horn straight, disk of the latter hollow: legs black; feet luteous: fore-wings lanceolate, brown, lurid towards the tips, very slightly punctured at the base; fore border slightly convex; hind border straight till near the tip where it is convex: hind-wings almost colourless. Length of the body  $2\frac{3}{4}$  line; of the wings 5 lines.

a. United States. Presented by the Entomological Club.

### 33. ENCHENOPA VENOSA, Fem.

*Picea; prothorax granulatus, ferrugineo marginatus, cornu porrecto compresso subcurvo attenuato subascendente rix acuto armatus, posticè attenuatus; abdomen et femora nigra; tarsi flavi; alæ antice luridae.*

Body pitchy: head granulated; front not widening towards the mouth, indented on each side, concave to half its length where

it joins the epistoma, its length in the middle about half its breadth; epistoma almost triangular; fore-chest granulated, with a ferruginous ridge in front and along the upper side, prolonged into a somewhat ascending, very slightly curved, compressed, tapering, but hardly pointed horn whose length is more than twice the depth of the fore-chest above the head; on each flank of the horn are five irregular ferruginous ridges, the upper one is forked near the tip of the horn and extends backward to the lower border of the fore-chest near the tip, the other four are indistinctly forked in front and are successively more short; fore-chest tapering backward nearly to the tip of the abdomen, very slender towards the tip which is pointed; upper side and lower side of the hind horn nearly straight; disk of the latter hollow: abdomen black towards the base; plates at the tip large, punctured: legs pitchy; thighs black; feet yellow: fore-wings lanceolate, lurid, punctured towards the base; fore border slightly convex; hind border straight till near the tip where it is slightly convex: hind-wings almost colourless. Length of the body  $4\frac{1}{2}$  lines; of the wings 6 lines.

- a. United States. Presented by the Entomological Club.  
b. New York.

### 31. ENCHENOPA FERRUGINEA, Mas.

*Ferruginea, granulata; prothorax cornu porrecto compresso obtuso non ascendente armatus, posticè attenuatus et luridus; abdomen apice luridum; pedes luridi; alæ anticae fuscae.*

Body ferruginous: head granulated; front not widening towards the mouth, slightly convex on each side, concave to somewhat less than half its length where it joins the epistoma, its length in the middle rather less than half its breadth; epistoma transversely elliptical: fore-chest granulated, with a ridge in front and along the upper side, prolonged into a horizontal, hardly curved, compressed, tapering but not pointed horn whose length much exceeds the depth of the fore-chest above the head; on each flank of the horn are four ridges; the upper one is strongly marked and extends from the tip backward to the lower border of the fore-chest a little beyond the base of the fore-wing; the other three are short, slight and oblique; fore-chest tapering backward to the tip of the abdomen, lurid and slender towards the tip which is pointed; upper side and lower side of the hind horn almost straight, disk of the latter hollow: legs and tip of the abdomen lurid: fore-wings lanceolate, brown, not punctured; fore border slightly convex; hind border straight till near the tip where it is slightly convex: hind-wings

almost colourless. Length of the body 3 lines; of the wings 5 lines.

a. Columbia. From Mr. Turner's collection.

### 35. ENCHENOPA DENSE, Mas.

*Nigra; prothorax ferrugineo marginatus, cornu porrecto compresso attenuato subcurvo acuto non ascendente armatus, posticè attenuatus et luridus; abdomen rufo fasciatum; pedes rufi; alæ anticae fuscae.*

Body black: head punctured; front not widening towards the mouth, slightly convex on each side, concave to somewhat less than half its length where it joins the epistoma, its length in the middle rather less than half its breadth; epistoma broader than long, somewhat truncate-conical in front, its edge ferruginous: fore-chest punctured, with a ridge in front and along the upper side, prolonged into a horizontal, slightly curved compressed tapering pointed horn whose length much exceeds the depth of the fore-chest above the head; on each flank of the horn are four ridges, the upper one is strongly marked and extends from the tip backward to the lower border of the fore-chest a little beyond the base of the fore-wings; the other three are short and indistinct; fore-chest tapering backward to the tip of the abdomen, lurid and slender towards the tip which is pointed; upper side and lower side of the hind horn almost straight; disk of the latter hollow: hind borders of the segments and tip of the abdomen dark red: legs red: fore-wings lanceolate, brown, not punctured; fore border slightly convex; hind border straight till near the tip where it is slightly convex: hind-wings colourless. Length of the body  $2\frac{1}{2}$  lines; of the wings 5 lines.

a. Columbia. From Mr. Turner's collection.

### 36. ENCHENOPA FRIGIDA, Fem.

*Fusca; prothorax ferrugineo marginatus, cornu porrecto compresso attenuato subascendente rix incurvo armatus, posticè attenuatus, apice luridus; abdomen rufum; pedes ferruginei; femora nigra; alæ anticae luridae.*

Body brown: head and fore-chest granulated, covered with shining yellow down: front narrower towards the epistoma, somewhat indented on each side, slightly concave where it joins the epistoma, its length in the middle nearly equal to half its breadth between the eyes: epistoma transverse, semi-elliptical, its length much less than half its breadth: fore-chest with a ferruginous ridge

in front and along the upper side, prolonged into a somewhat ascending hardly curved compressed tapering but not pointed horn, whose length exceeds the depth of the fore-chest above the head; on each flank of the fore-chest are four ferruginous ridges, the upper one is distinct, slightly undulating, and extends from the tip backward to the lower border of the fore-chest considerably beyond the base of the fore-wings; the second and third are short but strongly marked; the fourth is very indistinct; fore-chest tapering backward to the tip of the abdomen, very slender towards the tip which is lurid and pointed; upper side and lower side of the hind horn almost straight; disk of the latter hollow: breast black: abdomen dark red, sometimes black towards the base: legs ferruginous: thighs black: fore-wings lanceolate, lurid, not punctured; veins thinly covered with pale shining down; fore border slightly convex; hind border straight till near the tip where it is convex: hind-wings colourless. Length of the body  $3\frac{1}{2}$  lines; of the wings  $5\frac{1}{2}$  lines.

*a—f.* Nova Scotia. From Lieut. Redman's collection.

*g.* ———? From Mr. Children's collection.

### 37. ENCHENOPA BIMACULA, Mas.

*Nigra; prothorax ferrugineo marginatus, cornu porrecto compresso subattenuato vix incurvo armatus; abdomen fulvo fasciatum; pedes ferruginei; femora nigra; alae anticae luridae; areolarum disci sablimpidi.*

Body black: head and fore-chest granulated, covered with shining yellow down; front slightly convex on each side, with a triangular ferruginous spot on each side in front where it joins the epistoma, concave to nearly half its length which in the middle is less than half its breadth between the eyes; epistoma transverse, obconical, ferruginous along the fore border: fore-chest with a ferruginous ridge in front and along the upper side, prolonged into an almost horizontal, hardly compressed slightly tapering but not pointed horn, whose length slightly exceeds the depth of the fore-chest above the head; on each flank of the fore-chest are four ferruginous ridges; the upper one is strongly marked, slightly undulating, and extends from the tip backward to the lower border of the fore-chest at half the length between the hind tip of the latter and the base of the fore-wings; the other three are short and slightly undulating, the fourth is very slight: fore-chest tapering backward to the tip of the abdomen, slender towards the tip which is lurid and pointed; upper side and lower side of the hind horn straight; disk of the latter hollow: tip and hind borders of the segments of the abdomen

tawny: legs ferruginous; thighs black: fore-wings lanceolate, lurid, punctured towards the base; disks of the areolets almost colourless; veins thinly covered with pale shining down; fore border slightly convex; hind border straight till near the tip where it is slightly convex: hind-wings colourless. Length of the body  $2\frac{1}{2}$  lines; of the wings 5 lines.

a. Trenton Falls, New York. Presented by E. Doubleday, Esq.

### 38. ENCHENOPA BICOLOR, Mas.

*Fulva; prothorax cornu porrecto compresso attenuato subcurvo subacuto armatus; pectus et abdomen nigra, hoc fulvo fasciatum; femora nigra; alæ anticæ subfulvæ.*

Body black: head and fore-chest tawny, punctured, ferruginous between and above the eyes: front slightly indented on each side, deeply concave where it joins the epistoma, furrowed in the middle where its length is less than half its breadth between the eyes; epistoma transverse, almost elliptical, its hind border more convex than its fore border: fore-chest with a ridge in front and along its fore border, prolonged into a horizontal, slightly curved, compressed, tapering and almost pointed horn whose length very much exceeds the depth of the fore-chest above the eyes; on each flank of the fore-chest are four ridges; the upper one is distinct, slightly undulating, and extends from the tip backward to the lower border of the fore-chest at nearly half the length between the hind tip of the latter and the base of the fore-wings: fore-chest tapering backward beyond the tip of the abdomen, slender towards the tip which is pointed; upper side and lower side of the hind horn straight; disk of the latter hollow: a tawny spot on each side near the base of the abdomen; tip and hind borders of the segments tawny: legs tawny; thighs black: fore-wings lanceolate, pale tawny, punctured towards the base; fore border slightly convex; hind border straight till near the tip where it is slightly convex: hind-wings colourless. Length of the body  $2\frac{1}{2}$  lines; of the wings 5 lines.

a. Brazil. Presented by John Miers, Esq.

### 39. ENCHENOPA BREVIS, Mas.

*Nigro-fusca; prothoracis carina flavo-bimaculata; tarsi fulvi; alæ posticæ subcinereæ.*

Dark brown: head as broad as the chest; crown short; face long, conical: fore-chest thickly punctured, in front conical com-

pressed and not much produced : its length before the shoulders not exceeding its breadth between them ; upper ridge slightly undulating, extending to the tip of the abdomen, adorned with two pale yellow spots, one a little beyond the base of the fore-wings, the other at the tip ; two ridges on each side, diverging hindward, the lower one short, the upper slightly undulating and extending to the border at two-thirds of the length of the fore-chest : tarsi tawny : fore-wings dark brown, slightly punctured at the base of the fore border, with two discoidal areolets : hind-wings pale gray ; veins black. Length of the body  $1\frac{3}{4}$  line ; of the wings 3 lines.

a. United States. Presented by E. Doubleday, Esq.

#### 40. ENCHENOPA ASCENDENS, Fem.

*Picea, angusta ; prothorax cornu compresso lineari abruptè ascendente ferrugineo-quadrivittato armatus ; pectus et abdomen nigra ; pedes ferruginei.*

Pitchy, very narrow : head almost triangular, a little longer than broad, hardly narrower than the fore-chest : eyes prominent : fore-chest roughly punctured, very slightly ridged, transversely impressed near the fore border, prolonged in front of the head into a compressed abruptly ascending linear horn, its length is about four times its breadth, and it has two parallel ferruginous stripes on each side ; hind part of the fore-chest extending beyond the tip of the abdomen, having on each side a slight ridge which converges towards the acute tip ; breast and abdomen black : legs ferruginous ; tibiae flat, fusiform : wings pitchy, long and narrow ; fore-wings punctured with the exception of their tips and some part of the hind border. Length of the body  $3\frac{1}{2}$  lines ; of the wings 8 lines.

a. Columbia. From Mr. Turner's collection.

#### 41. ENCHENOPA SERICEA, Fem.

*Ferruginea ; prothorax cornu porrecto compresso subascendente attenuato armatus ; pectus et abdomen nigra ; alae nigro-fuscae.*

Ferruginous, clothed with yellow down : head conical, a little longer than broad, narrower than the fore-chest : fore-chest thickly and minutely punctured, ridged, prolonged in front of the head into a much compressed slightly ascending horn, which decreases very little in depth from the base to the tip and is there rounded, its length is about thrice its depth and it has three ridges along each side ; the upper pair of ridges inclose a long narrow lanceolate com-



partment and converge to the acute tip of the fore-chest which extends some distance beyond the tip of the abdomen: breast and abdomen black: anterior tibiæ flat, spindle-shaped; hind tibiæ beset with two rows of stout spines: wings dark brown; fore-wings punctured towards the base. Length of the body 4 lines; of the wings  $6\frac{1}{2}$  lines.

a. Venezuela. From Mr. Dyson's collection.

#### 42. ENCHENOPA LÆTA, Fem.

*Nigra; prothorax cornu compresso lanceolato subascendente armatus, posticè attenuatus gracilis compressus carinatus; ala antica macula magna limpida subtrigona ornatæ.*

Black, not shining: head thickly punctured, transverse, nearly triangular, as broad as the thorax, with a little tubercle on each side in front: eyes prominent: fore-chest roughly punctured, slightly ridged, produced in front of the eyes into a lanceolate, compressed very slightly ascending horn; this is nearly as long as the rest of the body, slightly nodulose above and below, keeled above, has a ridge beneath and one on each side, and is deeply excavated above and beneath near the tip which is notched, truncated and widened; the hind part forms a slender compressed keeled horn which is red beneath, is excavated beneath near the base, extends to half the length of the abdomen, and is attenuated towards the acute tip; it has a slight ridge on each side and is apart from the scutellum and the abdomen: fore-wings black, punctured at the base and along part of the fore border, with a very large colourless nearly triangular spot on the fore border near the tip, occupying more than half the breadth; veins black, tawny in the colourless part; basal areolets long, the other areolets short, more or less rhomboidal; one discoidal areolet: hind-wings colourless; veins black: abdomen bright red with a black tip: feet ferruginous. Length of the body  $3\frac{1}{4}$  lines; of the wings 6 lines.

a—d. Brazil. Presented by John Miers, Esq.

#### 43. ENCHENOPA? UNIVITTATA.

*Membracis univittata, Harris, Ins. New Engl.* 180.

United States.

## 44. ENCHENOPE? TAURINA.

*Membracis taurina*, *Harris, Ins. Massachusetts.*  
United States.

## Genus 5. BOLBONOTA.

*Centrotus*, *Fabr., Coqueb.*

*Membracis*, *Germ., Burm.*

*Bolbonota*, *Amyot et Serv. Hist. Nat. Hém: 537, 429. Fairm.*

## 1. BOLBONOTA GLOBOSA.

*Bolbonota globosa*, *Fairm. Ann. Soc. Ent. Fr. 2me Série, iv. 257, 1.*  
Columbia.

## 2. BOLBONOTA PUSILLA.

*Bolbonota pusilla*, *Fairm. Ann. Soc. Ent. Fr. 2me Série, iv. 258, 2.*  
Columbia.

## 3. BOLBONOTA PICTIPENNIS.

*Bolbonota pictipennis*, *Fairm. Ann. Soc. Ent. Fr. 2me Série, iv.*  
*258, 3.*  
Cayenne, Brazil.

## 4. BOLBONOTA MELÆNA.

*Bolbonota melæna*, *Fairm. Ann. Soc. Ent. Fr. 2me Série, iv. 256, 4.*  
*Membracis melæna*, *Germ. Silb. Rev. Ent. iii. 129, 20.*  
Brazil.

## 5. BOLBONOTA FLAVICANS.

*Bolbonota flavicans*, *Fairm. Ann. Soc. Ent. Fr. 2me Série, iv. 258, 5.*  
Brazil.

## 6. BOLBONOTA NISUS.

*Bolbonota nesus*, Amyot et Serv. *Hist. Nat. Hém.* 537. *Fairm.*

*Ann. Soc. Ent. Fr. 2me Série*, iv. 259, 6.

*Membracis nesus*, *Germ. Mag. Ent.* iii. 229, 2.

Brazil.

## 7. BOLBONOTA AURIPENNIS.

*Bolbonota auripennis*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 259, 7.

Brazil.

## 8. BOLBONOTA INÆQUALIS.

*Bolbonota inæqualis*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 259, 8.

*Centrotus inæqualis*, *Fabr. Syst. Rhyn.* 22, 23.

*Membracis inæqualis*, *Germ. Silb. Rev. Ent.* iii. 230, 22.

Brazil.

## 9. BOLBONOTA TUBERCVLATA.

*Bolbonota tuberculata*, *Fairm. Ann. Soc. Ent. 2me Série*, iv. 260, 9.

*Centrotus tuberculatus*, *Fabr. Syst. Rhyn.* 22, 32. *Coq. Ill. Icon.* pl. 18, f. 8.

*Membracis tuberculata*, *Burm. Handb. Ent.* ii. 1, 135, 1.

South America.

## 10. BOLBONOTA PUSIO.

*Bolbonota pusio*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 260, 10.

*Membracis pusio*, *Germ. Silb. Rev. Ent.* iii. 230, 23.

Brazil.

## Genus 6. SPHONGOPHORUS.

*Centrotus*, Kirby, *Westw.*

*Hypsauchenia*, *Germ.*, Amyot et Serv.

*Sphongophorus*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 260.

## 1. SPHONGOPHORUS BALLISTA.

Sphongophorus ballista, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 261, 1.

Hypsauchenia ballista, *Germ. Amyot et Serv. Hist. Nat. Hém.* 535, 1, pl. 9, f. 5.

Mexico.

## 2. SPHONGOPHORUS MIRABILIS.

Sphongophorus mirabilis, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 261, 2, pl. 4, f. 5, 6.

Interior of Brazil.

## 3. SPHONGOPHORUS PARADOXA.

Sphongophorus paradoxa, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 261, 3.

Membracis paradoxa, *Germ. Mag. Ent.* iv. 26, 27, pl. 1, f. 1.

Brazil.

## 4. SPHONGOPHORUS CLAVARIA.

Sphongophorus clavaria, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 261, 4, pl. 4, f. 2.

Brazil.

## 5. SPHONGOPHORUS BENNETII.

Sphongophorus Bennetii, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 262, 5, pl. 4, f. 7.

Centrotus Bennetii, *Kirby, Mag. Nat. Hist.* 1829, 20, f. 5, a.

Choco, Columbia.

## 6. SPHONGOPHORUS GUERINII.

Sphongophorus Guérinii, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 262, 6, pl. 4, f. 1.

Brazil.

## 7. SPHONGOPHORUS SPATULATUS.

*Sphongophorus spatulatus*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*,  
iv. 262, 7, pl. 4, f. 3.

Brazil.

## 8. SPHONGOPHORUS BICLAVATUS.

*Sphongophorus biclavatus*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*,  
iv. 262, 8, pl. 4, f. 4.

*Centrotus biclavatus*, *Westw. Dunc. Nat. Libr. Ent.* i. 286, pl. 25,  
f. 3.

Brazil.

## 9. SPHONGOPHORUS UNDULATUS, Mas.

*Luridus*; *capitis discus piceus*; *prothoracis cornu posticum undulatum, ascendens, piceo varium, apice truncatum, cornu inferius furcatum*; *furca superior bullifera*; *furca inferior lutea, compressa*; *tibiæ anticæ latissimæ ad discos piceæ*; *alæ posticæ sublimpidæ*.

Body lurid: head and fore-chest coarsely punctured: disk of the head pitchy; front transverse, not extending beyond the eyes, almost straight where it joins the epistoma, its breadth nearly twice its length: epistoma short-conical, hardly longer than broad, a little longer than the front: fore-chest divided into two parts; the upper part more than twice the length of the body from the head to the tip of the abdomen, quadrilateral, ascending obliquely backward, forming three curves, thicker in the middle and at the tip which is truncate and concave, and whose disk like that of each side is pitchy: the lower part is forked; the upper fork ascends almost perpendicularly and forms two bulbs, and ends in a small truncate tip which touches the second curve of the upper part; the lower fork is luteous, compressed, half the length of the upper fork, horizontal and concave beneath, ascending slightly above towards the tip which is obliquely truncated: legs lurid; shanks very broad, especially the fore-shanks which are almost oval; their disks pitchy: fore-wings lurid, punctured towards the base and along the fore border: hind wings almost colourless. Length of the body with the fore-chest  $4\frac{1}{2}$  lines; of the wings 5 lines.

a. Para. From Mr. Stevens' collection.

## Genus 7. PTERYGIA.

*Centrotus*, *Fabr.*

*Oxyrhachys*, *Germ.*

*Pterygia*, *De Laporte*, *Ann. Soc. Ent. Fr.* i.

*Notocera*, *Amyot et Serv. Hist. Nat. Hém.* 536, 427.

Group 1. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 263.

## 1. PTERYGIA ARIETINA.

*Pterygia arietina*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 263, 1.  
*Oxyrhachys arietina*, *Germ. Silb. Rev. Ent.* iii. 308.

*a, b.* Brazil. Presented by John Miers, Esq.

*c, d.* Brazil. From Mr. Stevens' collection.

## 2. PTERYGIA TREPIDA.

*Pterygia tripodia*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 263, 2,  
pl. 7, f. 30.

Cayenne.

## 3. PTERYGIA CRUCIATA.

*Pterygia cruciata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 264, 3.  
*Centrotus cruciatus*, *Fabr. Syst. Rhyn.* 18, 8. *Stoll, Cic.* 22, pl. 2,  
f. 8, 61, pl. 15, f. 77. *Perty, Del. An. Art. Bras.* 179, pl. 35,  
f. 14.

*Notocera cruciata*, *Amyot et Serv. Hist. Nat. Hém.* 536, 427, 1.

Cayenne.

## 4. PTERYGIA QUADRIDENS.

*Pterygia quadridens*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv.  
264, 4.

Cayenne.

## 5. PTERYGIA CRASSICORNIS.

*Pterygia crassicornis*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv.  
264, 5.

Brazil.

## 6. PTERYGIA SATANAS.

*Pterygia satanas*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 264, 6.  
*Tragona satanas*, *Lesson, Ill. Zool.* pl. 56, f. 2.

a. Para. From Mr. Stevens' collection.

## 7. PTERYGIA HISPIDA.

*Pterygia hispida*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 265, 7.  
 Columbia.

## 8. PTERYGIA MACQUARTI.

*Pterygia Macquarti*, *De Lap. Ann. Soc. Ent. Fr.* 1, 221, pl. 6. f. 6.  
 6, a. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 265, 8.

Brazil.

## 9. PTERYGIA HORRIFICA, Fém.

*Centrotus horrificus*, *Westwood, MSS.*

*Nigra, tuberculata, spinosa; prothorax supra bicornatus, posticè cornu longo undulato gibboso armatus; pedes lutei; femora nigra; alæ anticæ luridæ, piceo varicæ; alæ posticæ limpidæ.*

Body black: head and fore-chest thickly beset with little tubercles and short spines; most of the tubercles and some of the spines are pale yellow: front transverse, slightly concave where it joins the epistoma, its breadth about twice its length; epistoma conical, much longer than the front; fore-chest armed above the head with two horns which are full twice its depth; they are compressed, slightly curved backward, prismatic, truncated and much widened at their tips where the compartments are slightly concave: lower horn of the fore-chest extending horizontally a little beyond the tip of the abdomen, undulating beneath at its base and more slightly so towards the tip; two conical protuberances on its upper side, the first at the base about one-third of the breadth and of the height of the second which is near the tip: abdomen roughly punctured: legs luteous; thighs black: fore-wings lanceolate, lurid, pitchy, punctured and tuberculated at the base and along the fore border; hind-wings colourless. Length of the body  $2\frac{1}{2}$  lines; of the wings 5 lines,

a, b. Philippine Islands. From Mr. Cuming's collection.

c—e. Philippine Islands. From Mr. Wood's collection.

Group 2. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 265.

10. *PTERYGIA BRACHYCERA*.

*Pterygia brachycera*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 265, 9.  
Brazil.

11. *PTERYGIA QUINQUE-TUBERCULATA*.

*Pterygia quinque-tuberculata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*,  
iv. 266, 10.  
Venezuela.

12. *PTERYGIA TUBEROSA*.

*Pterygia tuberosa*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 266, 11.  
Corientes.

Group 3. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 266.

13. *PTERYGIA PILEATA*.

*Pterygia pileata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 266, 12,  
pl. 7, f. 28.  
Columbia.

14. *PTERYGIA CAPITATA*.

*Pterygia capitata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 267, 13  
pl. 7, f. 29.  
Columbia.

15. *PTERYGIA BIFIDA*.

*Pterygia bifida*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 267, 14.  
Cayenne.



## 16. PTERYGIA EXALTATA, Fem.

*Nigra*; *prothorax asperus, punctatus, spinosus, quinque-cornutus*; *cornua dua antica majora erecta parallela*; *cornu posticum abdomen superans, tricarinatum, ferrugineo varium*; *tarsi flavi*; *alæ antice fuscae, ferrugineo guttatae, apice albido maculate*; *alæ posticae cinerae*.

Black: face conical, concave: eyes large: fore-chest very roughly punctured, beset with short spines, with a slight ridge in front, armed above the head with two oblong, upright parallel horns which are convex on the outer side and concave on the inner side; behind them there is a smaller horn, and a still lower one rises at one-third of the distance between the latter and the tip: hind part convex, spindle-shaped, extending beyond the tip of the abdomen, with three ridges, partly ferruginous: tarsi yellow: fore-wings dark brown, roughly punctured for half the length from the base, with some ferruginous dots in the disk, and a whitish spot at the tip: hind-wings gray. Length of the body 2 lines; of the wings 3 lines.  
a. Brazil. Presented by John Miers, Esq.

## 17. PTERYGIA VARIA.

*Ferruginea*; *prothorax flavus, ferrugineo varius, bicornutus, fascia obliqua flavo-alba utrinque ornatus*; *cornu anticum supra caput erectum, apice dilatatum*; *cornu posticum abdomen superans, compressum, serratum, subundulatum*; *pedes fulvi*; *alæ antice fulvo variae*.

Body ferruginous: front transverse, with an indistinct middle ridge, slightly convex on each side, very concave where it joins the epistoma, its length rather more than half its breadth; epistoma convex in front, a little dilated on each side, a little longer than broad: fore-chest yellow, ferruginous here and there, armed above the head with a short horn which is curved backward, slightly compressed at its base, widened and quadrilateral at its tip where the compartments are semi-ovate and slightly concave; behind it and a little beyond its tip is an upright conical protuberance; from thence a compressed serrated and slightly undulating horn extends beyond the tip of the abdomen; an oblique yellowish-white band extends from the fore-chest to the breast on each side between the eye and the shoulder where there is a large yellow knob: legs tawny; fore-wings lanceolate, punctured, ferruginous, partly tawny: hind-wings almost colourless. Length of the body  $1\frac{1}{2}$  line; of the wings 2 lines.

a. Columbia. From Dr. Cuming's collection.

## Genus 8. OXYRHACHIS.

*Membracis*, *Fabr.*

*Centrotus*, *Fabr.*

*Oxyrhachis*, *Germ.*, *Burm.*, *Amyot et Serr.*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 267, 6.

## 1. OXYRHACHIS TARANDUS? Fem.

*Oxyrhachis tarandus?* *Germ. Silb. Rec. Ent.* iii. 232, 1. *Burm. Handb. Ent.* ii. 1, 133, 1. *Amyot et Serr. Hist. Nat. Hém.* 536, 1. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, 268, 1, pl. 4, f. 13.

*Membracis tarandus*, *Fabr. Ent. Syst. Suppl.* 514, 23.

*Centrotus tarandus*, *Fabr. Syst. Rhyn.* 19, 17.

*Picea*; *caput ferrugineo marginatum*; *prothoracis carina ferruginea*; *cornu posticum apice subtus serratum*; *pectus et abdomen albo pubescentia*; *pedes rufi*; *femora supra picea*; *tibiæ dilatatae*; *alæ limpidæ*; *alæ anticae basi piceo-fulvæ, marginibus posticis fusco maculatæ*.

Pitchy, clothed with tawny down: head transverse, subquadrate, flat, slightly impressed, finely punctured, not much broader than long, a little narrower than the fore-chest between the shoulders, ferruginous and undulating along the hind border, truncated and ferruginous in front: fore-chest rather high in front, roughly punctured, rising almost vertically from the head, with a very distinct pale ferruginous ridge; shoulders rounded, not prominent; horns above very broad, prismatic, conical, diverging, slightly ascending, very slightly curved downward, with ferruginous edges; hind side much shorter than either of the other sides; length of the horns rather more than twice the breadth of the chest between them: hind appendage very long, mostly ferruginous, extending very far beyond the tip of the abdomen, slightly undulating above, along half the length from whence to the tip it is slightly inclined upwards, and has a black serrated keel beneath: breast, abdomen and legs clothed with white down: legs red; thighs pitchy above; shanks widened: wings colourless; fore-wings tawny, punctured and partly pitchy at the base, with a brown spot on the angle of the hind border; veins thick, red; four discoidal areolets. Length of the body  $4\frac{1}{2}$  lines: of the wings  $7\frac{1}{2}$  lines.

a. North India. From Mr. Warwick's collection.

## 2. OXYRHACHIS SUBJECTA.

*Nigra, albo-pubescent; caput anticè ferrugineum; prothoracis carina ferruginea; pedes rufi; tibiæ dilatatae; alæ limpidae; alæ anticae basi fulvæ, marginibus posticis fusco maculatæ.*

Nearly allied to the preceding species, but is smaller; the dorsal horns are shorter in proportion and less diverging; the hind appendage is more inclined upward and not serrated beneath. Black, clothed with whitish down: head transverse, subquadrate, flat, slightly impressed, finely punctured, not much broader than long, a little narrower than the fore-chest between the shoulders, truncated and ferruginous in front: fore-chest rather high in front, rather roughly punctured, rising almost vertically from the head, with a ferruginous ridge; shoulders rounded, not prominent; horns above very broad, prismatic, conical, diverging, ascending, hardly curved downward; hind side much shorter than either of the other sides; length of the horns rather less than the breadth of the chest between them; hind appendage mostly ferruginous, extending very far beyond the tip of the abdomen, inclined upward and keeled beneath but not serrated from the middle to the tip: breast and abdomen clothed with white down: legs red; shanks widened: wings colourless; fore-wings tawny and punctured at the base, with a brown spot on the angle of the hind border; veins stout, ferruginous; four discoidal areolet. Length of the body 3 lines; of the wings  $5\frac{1}{2}$  lines.

a. East Indies.

## 3. OXYRHACHIS FURCICORNIS? Mas.

*Oxyrhachis furcicornis?* Germ. Silb. Rev. Ent. iii. 232, 2. Fairm. Ann. Soc. Ent. Fr. 2me Série, iv. 268, 2.

*Ferrugineo-rufa; prothoracis cornu posticum piceum; pectus piceo varium; tibiæ dilatatae; alæ limpidae; alæ anticae basi fulvæ.*

Ferruginous-red, clothed with tawny down: head transverse, subquadrate, flat, finely punctured, a little narrower than the fore-chest between the shoulders, mostly black, truncated in front: fore-chest ridged, moderately high in front, rather roughly punctured; shoulders rounded, not prominent; horns above pitchy, conical, prismatic, ascending, diverging, slightly inclined forward; hind side narrower than either of the other sides; chest very narrow between the horns, not more than one-third of their length; hind appendage

pitchy, slender, straight, extending some distance beyond the tip of the abdomen: breast partly pitchy: shanks widened: wings colourless; fore-wings tawny and punctured at the base; veins black, ferruginous at the base; four discoidal areolet. Length of the body  $2\frac{1}{2}$  lines; of the wings 6 lines.

a. South Africa. Presented by Dr. A. Smith.

#### 4. OXYRHACHIS DELALANDII? Mas.

*Oxyrhachis Delalandii?* *Faun. Ann. Soc. Ent. Fr. 2me Série*, iv. 268, 3.

*Cervina nigro varia*; *prothoracis cornua dorsalia porrecta, divaricata, apice arcuata*; *cornu posticum abdomen superans, supra tumidum, subtus serratum*; *femora nigra*; *tarsi ferrugini*; *ale limpide*; *ale anticae basi fulvae*; *venae nigro guttae aut nebulosae*.

Fawn-colour, very pubescent; head transverse, a little narrower than the fore-chest, truncate in front, notched on each side, black on each side adjoining the eye; its breadth not much exceeding its length; face obconical, less than half the length of the head: fore-chest roughly punctured, deep in front, varied with black, rising almost vertically from the head, slightly ridged; shoulders rounded, not prominent: horns above short, very thick, irregularly prismatic, acute, slightly diverging and inclined forward; their tips curved outward; outer side and hind side slightly concave; inner side concave near the base, transversely ridged towards the tip; hind horn extending much beyond the tip of the abdomen, very slightly curved upward; lower side flat, obliquely serrated near its tip; upper side with a concave curve, forming a semi-oval between two humps, the first at the base almost angular, the second near the tip lower and more rounded: breast mostly black: abdomen sometimes ferruginous: thighs black; shanks dilated; feet ferruginous: wings colourless; fore-wings tawny and punctured at the base; veins tawny, with black dots; some of the cross-veins clouded with black; four discoidal areolet; veins of the hind-wings black. Length of the body  $2\frac{1}{2}$  lines; of the wings 5 lines.

a. Cape. From M. Drège's collection.

b, c. Port Natal. From M. Guenzins' collection.

## 5. OXYRHACHIS GAMBIE.

*Oxyrhachis Gambiæ*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 269, 4.

Senegal.

## 6. OXYRHACHIS SUBSERRATA, Fem.

*Picea*; *prothorax ferrugineo varius*; *cornua dorsalia lata, acuta, divaricata, ferè plana*; *cornu posticum abdomen superans undulatum, apice nigrum subascendens et subtus serratum*; *pedes luridi*; *femora nigra*; *alee luride, basi nigre*.

Pitchy, clothed with tawny down: head flat above, hardly broader than long, a little narrower than the fore-chest, notched and with a quadrate membrane on each side in front; disk slightly impressed; hind border slightly convex; face narrow, black, obconical, occupying half the length of the head: fore-chest thick, roughly punctured, partly ferruginous, rising vertically above the head, slightly ridged; shoulders obtusely angular, not prominent; above them are two very broad acute prismatic almost directly diverging horns; angles of the horns slightly ridged; lower sides and hind sides slightly concave; upper side slightly convex, broader than the lower side, much broader than the hind side; behind these the fore-chest forms a long horn which extends far beyond the tip of the abdomen; it is compressed and quadrilateral, and forms above two long and very gentle curves; behind these it is black, very obliquely inclined upward, and obliquely serrated beneath: legs lurid, clothed with pale yellow hairs; thighs black; shanks dilated: wings lurid, punctured at the base, black at the base along the fore borders, ferruginous towards the hind borders; veins of fore-wings pitchy, clouded, tawny towards the base of the fore border. Length of the body  $4\frac{1}{2}$  lines; of the wings 9 lines.

a. Congo. Presented by Sir J. Richardson.

## 7. OXYRHACHIS RUFESCENS, Fem.

*Picea, ferrugineo varia, pedes ferruginei*; *tibiæ subdilatatae*; *alee limpide*; *alee anticae basi piceae*.

Nearly allied to *O. subjecta*. Pitchy, clothed with whitish hairs: head black, transverse, thinly punctured, not much broader than long, a little narrower than the fore chest, slightly impressed in front, ferruginous and slightly convex along the hind border, ferruginous about the eyelets, ferruginous and truncated on each side of the face

which is almost oval: fore-chest thinly and roughly punctured, moderately deep and slightly convex in front, rising almost vertically from the head, with a ferruginous and very slight ridge; shoulders rounded, ferruginous, not prominent; horns above conical, broad, prismatic, diverging, almost horizontal, very slightly curved downward, at right angles to the chest, in length not exceeding the breadth of the chest between them; edges ferruginous; hind side not more than half the breadth of the other sides: legs ferruginous; shanks slightly widened: wings colourless; fore-wings pitchy and punctured at the base; veins ferruginous; fourth longitudinal vein pitchy towards the base; four discoidal areolets. Length of the body 3 lines; of the wings 7 lines.

#### 8. OXYRHACHIS VETUSTA, Feni.

*Nigra, cano-hirta; pectus et abdomen ferruginea; pedes ferruginei; tibiæ dilatæ; alæ limpide; alæ anticæ basi fulvæ.*

Black, thickly clothed with hoary hairs: head transverse, narrower than the fore-chest, truncate and ferruginous on each side of the face, which is almost obconical, and about half the length of the head: eyes very prominent: fore-chest roughly punctured, deep in front, rising vertically from the head, slightly ridged: shoulders almost flat: horns above conical, long, broad, prismatic, porrect, slightly diverging, very slightly ascending, in length full six times the breadth of the chest between them; upper side narrower than either of the other sides: breast and abdomen ferruginous: abdomen covered with whitish bloom: legs ferruginous; shanks dilated: wings colourless; fore-wings punctured and tawny at the base; veins ferruginous; four discoidal areolets. Length of the body 4 lines; of the wings 7 lines.

a. Port Natal. From M. Guéinzus' collection.

#### 9. OXYRHACHIS DILATICORNIS, Feni.

*Ferruginea; cornua antica compressa; tibiæ vix dilatæ; alæ limpide; alæ anticæ basi ferrugineæ, albido fasciatæ.*

Ferruginous, clothed beneath with white down: head and fore-chest thickly punctured: head very short, slightly impressed, transversely subfusiform, a little narrower than the chest; face broad, conical in front, semicircular behind, shorter than the head behind it: eyes very prominent: fore-chest low in front, distinctly ridged, rising almost vertically from the head; shoulders rounded, not pro-

minent; horns above much compressed, very broad, especially in the middle, slightly inclined forward, very slightly diverging, indistinctly ridged, in length full twice the breadth at the base: legs clothed with white hairs; shanks hardly widened: wings colourless; fore-wings at the base ferruginous with a whitish band; veins ferruginous; four discoidal almost rhomboidal areolets. Length of the body 4 lines; of the wings 9 lines.

#### 10. OXYRHACHIS PARALLELA, Fem.

*Picea*; *pedes ferruginei*; *tibiæ sat latæ*; *alæ anticæ subfulvæ, basi flavæ*; *alæ posticæ limpide*.

Pitchy, clothed with tawny down: head transverse, flat, very little broader than long, finely punctured, a little narrower than the fore-chest between the shoulders, truncate in front: hind part of the face obconical, not so long as the head behind it: fore-chest roughly punctured, low, very slightly ridged, rising vertically from the head; shoulders rounded, hardly prominent; horns above porrect, prismatic, slightly ascending, conical, almost parallel; their length equal to about thrice the breadth of the chest between them; hind appendage keeled, extending far beyond the tip of the abdomen, very slightly tapering from the base to the tip, slightly inclined upwards towards the tip which is conical: legs ferruginous; shanks rather broad: fore-wings narrow, lanceolate, slightly tawny, punctured and partly yellow at the base; veins ferruginous; cross-veins pitchy: hind-wings colourless. Length of the body  $3\frac{1}{2}$  lines; of the wings 7 lines.

a. Port Natal. From Dr. Krauss' collection.

#### 11. OXYRHACHIS SUBERECTA, Mas.

*Picea, albo-pubescentis*; *pedes ferruginei*; *femora nigra*; *tibiæ subdilatatae*; *alæ anticæ subluridæ, basi fulvæ et punctatæ*.

Nearly allied to *O. parallelus*, but the lateral horns diverge slightly, and are hardly inclined forward. Pitchy, clothed with whitish down: head transverse, flat, finely punctured, not much broader than long, truncate in front, very little narrower than the fore-chest between the shoulders; face obconical, occupying less than half the length of the head: fore-chest roughly punctured, rather high in front, rising almost vertically from the head; horns above stout, prismatic, conical, slightly diverging and very slightly inclined forward; their length slightly exceeding the space between

them at the tips, and full thrice the breadth of the chest between them at the base; hind appendage keeled, very slightly curved upward, extending much beyond the tip of the abdomen, very slightly tapering from the base to the tip: legs ferruginous; thighs black; shanks slightly widened: fore-wings slightly lurid, tawny and punctured at the base; veins ferruginous; three or four discoidal areolet. Length of the body 3 lines; of the wings 6 lines.

a. Port Natal. From Dr. Krauss' collection.

## 12. OXYRHACHIS UNICOLOR, Fem.

*Picea*; *pedes ferruginei*; *femora nigra*; *tibiæ latæ*; *alæ anticæ sublimpidæ*, *basi fulco-ferruginæ*; *alæ posticæ limpidæ*.

Pitchy, thickly clothed with tawny hairs: head and fore-chest thickly punctured: head transverse, not much broader than long, flat, slightly convex along the hind border, truncated in front, a little narrower than the fore-chest between the shoulders: fore-chest ridged, rather low, rising vertically from the head: shoulders rounded, not prominent; horns above conical, prismatic, inclined forward, ascending, slightly diverging; their length equal to rather less than twice the breadth of the chest between them; hind appendage keeled, extending far beyond the tip of the abdomen, very slightly tapering from the base to the tip which is acute; very slightly undulating along the ridge: legs ferruginous; thighs black; shanks dilated: fore-wings almost colourless, long, narrow, lanceolate, punctured, ferruginous and partly tawny at the base; veins ferruginous, stout: hind-wings colourless. Length of the body 3 lines; of the wings 7 lines.

a—c. East Indies. Presented by Capt. Parry.

## 13. OXYRHACHIS RUDIS, Mas.

*Ferruginæ*; *caput piceum*, *anticæ ferrugineo-bimaculatum*; *prothoracis cornu posticum apice subtus serratum*; *tibiæ dilatatæ*; *alæ limpidæ*; *alæ anticæ margine postico fusco maculatæ*.

Ferruginous: head pitchy, transverse, flat, finely punctured, truncated, and with a ferruginous spot on each side in front, not much broader than long, a little narrower than the fore-chest between the shoulders: fore-chest very roughly punctured, slightly ridged, rising vertically from the head; shoulders rounded, not prominent: horns above very broad, conical, diverging, almost horizontal, slightly curved; disk of the inner side slightly concave



towards the base; hind side less than half the breadth of either of the other sides; hind appendage keeled, extending very far beyond the tip of the abdomen, tapering and slightly declining from the base to the middle, where it is deepened and keeled beneath, and from thence to the tip it is serrated beneath and slightly inclined upward: shanks dilated: wings colourless; fore-wings narrow, lanceolate, with a small pale brown spot on the angle of the hind border; veins thick, ferruginous; three discoidal areolets. Length of the body 3—3½ lines; of the wings 6—7 lines.

*a.* North Bengal. From Miss Campbell's collection.

### Genus 9. TETRAPLATYS, N.

Caput non productum: thorax inermis: tibiæ anteriores latissimæ; posticæ graciles, serratæ.

Head not prolonged: chest without horns above the shoulders: four anterior shanks much dilated; hind shanks slender, serrated.

#### 1. TETRAPLATYS ATOMARIUS, Mas.

*Niger, brevis, crassus; tarsi lutei; alæ anticae nigrae, luteo vel albido guttatæ, apice albæ; alæ posticæ limpidæ.*

Black, short, broad, thick, dull: head and fore-chest minutely punctured: head longer than broad, very much narrower than the fore-chest; face rhomboidal, almost as large as the hinder part of the head: eyes prominent: fore-chest high, with a distinct middle ridge, and with three irregular ridges on each side; shoulders rounded, not prominent; hind appendage broad, triangular, slightly tuberculate, extending nearly to the tip of the abdomen, its keel undulating above: four anterior shanks very broad, almost elliptical; hind-shanks serrated; tarsi luteous: anterior wings black, adorned with some luteous or whitish dots or spots in the disk, and with a white spot at the tip: hind-wings colourless. Length of the body 1½ line; of the wings 3 lines.

*a—c.* Brazil. Presented by John Miers, Esq.  
*f, g.* Columbia. From Mr. Turner's collection.

### Genus 10. HOPLOPHORA.

*Centrotus, Fabr., Coqueb.*  
*Membracis, Germ.*

*Hoplophora*, *Germ., Burn., Amyot et Serv. Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 269, 7.

Group 1. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 269.

1. *HOPLOPHORA GIGANTEA*.

*Hoplophora gigantea*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 269, 1.

*a, b.* Columbia. From M. Jurgens' collection.

2. *HOPLOPHORA SANGUINOSA*.

*Hoplophora sanguinosa*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 270, 2.

*a, b.* Mexico. From M. Hartweg's collection.

3. *HOPLOPHORA VICINA*.

*Hoplophora vicina*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 270, 3, pl. 6, f. 10.

Columbia.

4. *HOPLOPHORA LINEATA*.

*Hoplophora lineata*, *Sturm, MSS. Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 270, 4, pl. 6, f. 12—14.

North America.

5. *HOPLOPHORA VITTATA*.

*Hoplophora vittata*, *Burn. Handb. Ent.* ii. 1, 134, 2.

*H. vittata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 271, 5.

*Centrotus vittatus*, *Fabr. Syst. Rhyn.* 20, 23. *Coq. Ill. Icon.* pl. 21, f. 5.

America.

## 6. HOPLOPHORA PERTUSA.

*Hoplophora pertusa*, *Klug, Germ. Silb. Rev. Ent.* iii. 242, 5. *Burm. Handb. Ent.* ii. 1, 134, 3. *Anyot et Serr. Hist. Nat. Hém.* 544. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 271, 6.

a. Brazil. Presented by John Miers, Esq.

## 7. HOPLOPHORA VARIEGATA.

*Hoplophora variegata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 271, 7.

a. Columbia. From Mr. Turner's collection.

## 8. HOPLOPHORA MONOGRAMMA.

*Hoplophora monogramma*, *Germ. Silb. Rev. Ent.* iii. 24, 2, 6. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 271, 8.

Mexico.

## 9. HOPLOPHORA SORDIDA.

*Hoplophora sordida*, *Germ. Silb. Rev. Ent.* iii. 243, 7. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 271, 9.

Brazil.

## 10. HOPLOPHORA CRIBRUM.

*Hoplophora cribrum*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 272, 10.

Columbia.

## 11. HOPLOPHORA CORROSA.

*Hoplophora corrosa*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 272, 11, pl. 6, f. 11.

Bogota.

## 12. HOPLOPHORA PUNCTUM.

*Hoplophora punctum*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 272, 12.

Columbia.

## 13. HOPLOPHORA CINEREA.

*Hoplophora cinerea*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 272, 13.

Mexico.

## 14. HOPLOPHORA TRIANGULUM.

*Hoplophora triangulum*, *Germ. Silb. Rev. Ent.* iii. 242, 4. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 273, 14.

Brazil.

## 15. HOPLOPHORA PROXIMA, Mas.

*Rufa*, *nigro varia*; *prothorax viridis*, *rufo marginatus*, *nigro guttatus*; *pedes rufi*; *tarsi supra picei*; *ala antice sublurida*.

Body red: head thickly clothed with whitish hairs, among which are a few black hairs; on each side between the eyes is a depression whose disk is black, between these a black stripe extends to the fore border which is truncated, retuse and partly black: fore-chest pale green, bordered with red, thinly clothed with short whitish hairs, thickly covered with black punctures of various size, with a larger depression in front on each side of the dorsal ridge, slightly concave behind each shoulder and slightly convex nearer the tip; each shoulder forming an angle whose length does not exceed the breadth at its base; tip black, very acute, extending nearly to the tip of the abdomen: breast and abdomen partly black: legs red, thickly clothed with long whitish hairs: feet pitchy above: fore-wings with a slight lurid tinge, colourless towards the tips: veins red, pitchy towards the tips: hind-wings colourless with black veins. Length of the body 4 lines; of the wings 12 lines.

a. Quito. Presented by W. Hewitson, Esq.

## 16. HOPLOPHORA POROSA, Fem.

*Hoplophora porosa*, *B. M., MSS.*

*Rufa*; *caput flavum*, *albo-hirtum*; *prothorax flavus*, *rufo marginatus*, *nigro guttatus*; *tibiæ nigro unimaculatæ*; *ala limpide*.

Body pale red: head and fore-chest pale yellow: head thickly clothed with whitish hairs, having on each side between the eyes a

depression whose disk is black; a retuse lobe on each side of the face which is small and nearly triangular; epistoma triangular, longer and broader than the face: fore-chest bordered with red, thickly covered with black punctures of various sizes, with a larger depression in front on each side of the middle ridge, concave behind each shoulder and slightly convex nearer the tip; each shoulder forming an obtuse angle whose length is much less than its breadth at the base; tip very acute, extending nearly to the tip of the abdomen: legs pale red, clothed with long whitish hairs; a black spot on each shank: wings colourless; veins pale red. Length of the body 4 lines; of the wings 10 lines.

<sup>1</sup> Presented by J. G. Children, Esq.

*b—d.*

#### 17. HOPLOPHORA CONCOLOR, Fem.

*Viridis; pedes flavi; tarsi rufi; alae anticae subfulvae; alae posticae limpidae.*

Body green: head slightly punctured; front slightly retuse on each side of the fore border, its breadth more than twice its length; face nearly round, not half the breadth of the front; epistoma triangular, longer than the face: fore-chest thickly punctured, slightly concave behind each shoulder which forms a cone whose length is less than its breadth at the base; middle ridge very slight; tip very acute, extending nearly to the tip of the abdomen: legs pale yellow, clothed with whitish hairs; feet red: fore-wings with a pale tawny tinge, punctured at the base; veins pale red: hind-wings colourless. Length of the body 3 lines; of the wings 9 lines.

*a.* Columbia. From Mr. Turner's collection.

#### 18. HOPLOPHORA HUMILIS, Mas.

*Fulva, nigro varia; tibiae nigro vittatae; tarsi nigri; alae anticae subfulvae; alae posticae subcinereae.*

Tawny: head a little narrower than the fore-chest; crown black, with tawny marks; eyes prominent: fore-chest obconical, roughly punctured, marked with black, extending to the tip of the abdomen, ending in a sharp point, with a very slight middle ridge which is black in front; shoulders angular, slightly prominent: shanks slightly striped with black; feet mostly black: fore-wings pale tawny, slightly rugulose, punctured and with some black and luteous marks towards the base; veins pitchy, partly tawny along the fore border:

hind-wings slightly tinged with gray. Length of the body 3 lines : of the wings  $7\frac{1}{2}$  lines.

a. ——— ?

Group 2. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 273.

#### 19. HOPLOPHORA GRANADENSIS.

*Hoplophora granadensis*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 273, 15.

Columbia.

#### 20. HOPLOPHORA SAGITTATA.

*Hoplophora sagittata*, *Germ. Silb. Rev. Ent.* iii. 241, 2. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 273, 16.

*Membracis sagittata*, *Germ. Mag. Ent.* iv. 19, 15.

Brazil.

#### 21. HOPLOPHORA QUADRILINEATA.

*Hoplophora quadrilineata*, *Germ. Silb. Rev. Ent.* iii. 241, 3. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 273, 17.

Carolina.

Group 3. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 273.

#### 22. HOPLOPHORA TUBERCULATA.

*Hoplophora tuberculata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 273, 18, pl. 6, f. 9.

California.

#### 23. HOPLOPHORA ORNATA.

*Hoplophora ornata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 274, 19.

Mexico.

## Genus 11. PHYSOPLIA.

*Physoplia*, *Amyot et Serv. Hist. Nat. Hém.* 542, 438.  
*Umbonia*, *Fairm.*

## 1. PHYSOPLIA NIGRATA.

*Physoplia nigrata*, *Amyot et Serv. Hist. Nat. Hém.* 543.  
*Umbonia nigrata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 275, 1,  
 pl. 6, f. 6, 7.

a. Brazil. Presented by H. G. Harrington, Esq.

## 2. PHYSOPLIA MEDIA, Mas.

*Flava*; *caput nigro varium*; *prothorax nigro et rufo vittatus*; *abdomen nigro interruptè vittatum, subtus maculis nigris bivittatum*; *pedes rufi*; *tibiæ nigro varicæ*; *alæ anticæ fulvæ, basi flavæ*.

Body yellow: head yellow above, varied with black, slightly punctured; front with a slightly forked rim along each side of the fore border, its breadth more than twice its length; face small, nearly round, much less than half the breadth of the front: fore-chest bright yellow, thickly punctured, with two slender blackish stripes which include two broad more or less united red stripes; a similar stripe but more indistinct ascends on each side to the horn, between which and the tip there is a single red stripe; two large black punctures on each side of the fore border; each shoulder produced into a short cone which is much broader than long and has a black spot on its tip; middle ridge indistinct in front, more prominent as it ascends the horn; the latter is longer than the body and rises upward obliquely and is then compressed and inclined backward horizontally; it is black varied with yellow towards the tip and has on each side a red ridge which sometimes is partly double or treble: breast partly black: a black interrupted stripe along the abdomen beneath where there is a black spot on each side of the fore border of every segment: legs red, clothed with short whitish hairs; shauks slightly marked with black; fore-wings tawny, yellow and punctured towards the base; veins pitchy: hind-wings colourless. Length of the body 4 lines; of the wings 12 lines.

a—b. Mexico. From Mr. Argent's collection.

c. Mexico. From M. Hartweg's collection.

3. *PHYSOPLIA CRASSICORNIS*.

*Physoplia crassicornis*, *Amyot et Serv. Hist. Nat. Hém.* 543, pl. 10, f. 1.

*Umbonia crassicornis*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 275, 2.

*a.* Mexico. From Mr. Walker's collection.

*b.* Mexico.

Genus 12. *UMBONIA*.

*Cicada*, *Fabr., Gmel.*

*Membracis*, *Fabr., Oliv.*

*Centrotus*, *Fabr.*

*Hoplophora*, *Germar.*

*Umbonia*, *Burm. Handb. Ent.* ii. 1, 138, 12. *Amyot et Serv., Fairm.*

*Hemiptycha*, *Blanchard.*

Group 1. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 275. B.

1. *UMBONIA GLADIUS*.

*Umbonia gladius*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 275. 3, pl. 6, f. 4, 5.

*a.* Venezuela. From Mr. Dyson's collection.

2. *UMBONIA TURRITA*.

*Umbonia turrita*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 276, 4.

*Hoplophora turrita*, *Germ. Silb. Rev. Ent.* iii. 243, 10, pl. 6, f. 8.

*a.* Brazil. From Mr. Shuckard's collection.

3. *UMBONIA OBSCURA*, Fem.

*Fulva*; *prothorax nigro guttatus*; *cornua lateralia longa, acuta, subcompressa, obliquè porrecta, vix arcuata*; *cornu dorsale porrectum, obliquè ascendens*; *alæ antice turidæ.*

Body tawny, partly black: fore-chest thickly covered with large black punctures, attenuated into a very acute point which is much



beyond the tip of the abdomen; middle ridge very slight; each shoulder produced into a long pointed somewhat compressed horn, which diverges obliquely forward and is very slightly curved downward; a little behind these on the back there is a straight somewhat compressed horn, which is inclined obliquely forward and is broader but not longer than each shoulder-horn; legs tawny: fore-wings lurid, punctured towards the base; veins tawny: hind-wings almost colourless. Length of the body 5 lines; of the wings 10 lines.

*a, b.* Brazil. From Mr. Mornay's collection.

#### 4. UMBONIA APICALIS, Fem.

*Pulex, nigro guttata; cornua lateralia longa, subcompressa, oblique divaricata, acuta; cornu dorsale porrectum, compressum, subrecurvum, oblique ascendens; pectus nigrum; alæ antice subluridæ.*

Body tawny: head slightly rugulose, varied with black: face ferruginous, very convex, not half the breadth of the head: fore-chest thickly covered with large black punctures, attenuated into a very acute point which is much beyond the tip of the abdomen; middle ridge very slight, not extending far from the fore border: each shoulder produced into a long pointed somewhat compressed horn which diverges obliquely forward and is very slightly curved downward; its outer side black, its tip pale tawny; a third equally long, somewhat compressed and slightly recurved horn rises from the back a little behind these and is inclined obliquely forward: breast mostly black: legs tawny: fore-wings slightly lurid, punctured towards the base; veins tawny, partly green: hind-wings almost colourless. Length of the body 4 lines; of the wings 8 lines.

*a.* Columbia. From Mr. Turner's collection.

Group 2. *Faism. Ann. Soc. Ent. Fr. 2me Série, iv. 276. C.*

#### 5. UMBONIA RECLINATA.

*Umbonia reclinata, Faism. Ann. Soc. Ent. Fr. 2me Série, iv. 276, 5. pl. 6, f. 3.*

*Hoplophora reclinata, Germ. Silb. Rev. Ent. iii. 243, 9.*

*a.* Brazil. Presented by H. G. Harrington, Esq.

*b.* Mexico.

Group 3. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 276, 10.

#### 6. UMBONIA SPINOSA.

*Umbonia spinosa*, *Burm. Handb. Ent.* ii. 1, 138, 1. *Amyot et Sere. Hist. Nat. Hém.* 543. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 276, 6.

*Centrotus spinosus*, *Fabr. Syst. Rhyn.* 17, 6.

*Cicada spinosa*, *Fabr. Sp. Ins.* ii. 316, 5. *Mant. Ins.* ii. 263, 13. *Stoll, Cic.* pl. 21, f. 116. *Gmel. Ed. Syst.* i. 3, 2094, 66. *Sulz. Hist. Ins.* pl. 9, f. 6.

*Membracis armata*, *Fabr. Ent. Syst.* iv. 11, 12. *Oliv. Enc. Méth.* vii. 668, 3.

*Hoplophora spinosa*, *Germ. Silb. Rev. Ent.* iii. 243, 8.

*Hemiptycha spinosa*, *Blanch. Hém.* 184, 3, pl. 13, f. 6.

a. Brazil. Presented by W. Raddon, Esq.

b. Brazil. Presented by John Miers, Esq.

c, d. British Guiana. From Sir R. Schomburgk's collection.

e. Brazil. From Mr. Mornay's collection.

f—m. Brazil.

n. Cayenne.

#### 7. UMBONIA OROZIMBO.

*Umbonia Orozimbo*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 277, 7, pl. 6, f. 2.

a. Mexico. Presented by the Entomological Club.

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#### 8. UMBONIA PYRAMIDALIS.

*Umbonia pyramidalis*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 277, 8,

Brazil.

#### 9. UMBONIA AMAZILI.

*Umbonia Amazili*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 277, 9. North America.

#### 10. UMBONIA SIGNORETI.

*Umbonia Signoreti*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 278, 10, pl. 6, f. 6.

a. Columbia. From Mr. Turner's collection.

## 11. UMBONIA ATALIBA.

Umbonia Ataliba, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 278, 11, pl. 6, f. 1.

South America.

Group 4. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 278. E.

## 12. UMBONIA VENOSA.

Hoplophora venosa, *Germ. Silb. Rev. Ent.* iii. 24, 1. *Burm. Handb. Ent.* ii. 1, 134, 1.

Membracis venosa, *Germ. Mag. Ent.* iv. 19, 16.

Umbonia venosa, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 278, 12. Brazil.

## 13. UMBONIA INDICATOR.

Umbonia indicator, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 279, 13, pl. 6, f. 15.

Cayenne.

## 14. UMBONIA REDUCTA, Fem.

*Flava; prothorax rufo sexradiatus; radii antici subcurvi; cornua lateralia rufa; pedes fulvi; alae antice fuscae.*

Body yellow: fore-chest thickly and roughly punctured, extending nearly to the tip of the fore-wings; its horn shorter than that of *U. spinosa*, from it six red rays diverge to the border: the side pair in front are slightly curved inward; shoulders produced into short horns which are mostly red, their length is rather less than their breadth at the base; middle ridge very slight: legs tawny: fore-wings brown; veins pitchy. Length of the body 7 lines: of the wings 15 lines.

a. Para. From Mr. Stevens' collection.

## 15. UMBONIA LATIVITTA, Fem.

*Flava; prothorax rufo sexradiatus; cornua lateralia nigra, basi rufa; pedes fulvi; tibiae nigro vittatae; alae antice subfulvae, apice subfuscae.*

Body yellow: fore-chest thickly and roughly punctured, extending nearly to the tips of the fore-wings; from it four rather

broad red rays diverge to the border; the side pair in front are rather broader than the middle one which is accompanied by a slight ridge; shoulders produced into short black horns which are red at the base; their breadth exceeds their length: legs tawny; shanks striped with black: fore-wings pale tawny, brownish towards their tips; veins tawny. Length of the body 6 lines; of the wings 14 lines.

*a.* Brazil. From Mr. Walker's collection.

#### 16. UMBONIA ——— Pupa.

*a—c.* British Guiana. Presented by Sir R. Schomburgk.

#### 17. UMBONIA ——— Pupa.

*a.* Venezuela. From Mr. Dyson's collection.

#### 18. UMBONIA ——— Pupa.

*a.* ———? From Mr. Argent's collection.

### Genus 13. TRIQUETRA.

*Triquetra*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 279.  
*Hoplophora*, *German.*

#### 1. TRIQUETRA INERMIS.

*Triquetra inermis*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 280, 1.

*a.* Columbia. From Mr. Turner's collection.

#### 2. TRIQUETRA NIGRO-CARINATA.

*Triquetra nigro-carinata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 280, 2.

*a.* Columbia. From Mr. Turner's collection.

## 3. TRIQUETRA GROSSA.

*Triquetra grossa*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 280, 3.  
a. Venezuela. From Mr. Dyson's collection.

## 4. TRIQUETRA TRIDENTATA.

*Triquetra tridentata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 280, 4.  
Bogota.

## 5. TRIQUETRA USTULATA.

*Triquetra ustulata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 281, 5.  
Bogota.

## 6. TRIQUETRA FASTIDIOSA.

*Triquetra fastidiosa*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv.  
281, 6.  
Columbia.

## 7. TRIQUETRA TESTACEA.

*Triquetra testacea*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 281, 7.  
Bogota.

## 8. TRIQUETRA VIRESCENS.

*Triquetra virescens*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 281, 8.  
a. Venezuela. From Mr. Dyson's collection.

## 9. TRIQUETRA VIRGATA.

*Triquetra virgata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 282, 9,  
pl. 6, f. 27.  
Bogota.

## 10. TRIQUETRA BOS.

*Triquetra bos*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 282, 10.  
Bogota.

## 11. TRIQUETRA ANGUSTATA.

*Triquetra angustata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 282, 11.

Bogota.

## 12. TRIQUETRA TRUNCATICORNIS.

*Triquetra truncaticornis*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 282, 12.

*Hoplophora truncaticornis*, *Germ. Silb. Rev. Ent.* iii. 244, 11.

Brazil.

## 13. TRIQUETRA SOBRIA, Fem.

*Flava*; *prothoracis cornu dorsale carinis quadriradiatum*; *cornua lateralia, carina dorsalis, pectus et abdomen nigra*; *pedes fulvi*; *tibiae posticae apice piceae*; *alae anticae fulvae*.

Yellow: head with a short black stripe which has a black dot in front and two on each side: fore-chest thickly punctured, with a short acute upright horn, from whose tip four ridges radiate on each side; each shoulder produced into a short compressed almost acute horn, which is slightly inclined forward, mostly black and rather broader than long; keel black for three-fourths of the length from the head, its tip acute, extending to the tips of the fore-wings: breast partly black: abdomen black; tip beneath ferruginous: legs tawny, tips of hind-shanks pitchy: fore-wings tawny, punctured towards the base; veins ferruginous: hind-wings paler. Length of the body  $4\frac{1}{2}$  lines; of the wings 9 lines.

a. Quito. Presented by W. Hewitson, Esq.

## 14. TRIQUETRA VENOSA, Fem.

*Flava*; *prothoracis carina nigra*; *abdomen nigrum, apice fulvum*; *pedes fulvi*; *alae anticae flavae, apice fulvae*.

Yellow: head and fore-chest thickly punctured: fore-chest with a short acute horn which is slightly inclined forward; three very slight almost parallel ridges proceed from its tip on each side, and join one of the longitudinal ridges which are strongly marked; each shoulder produced into a short compressed conical horn which is

broader than long and hardly inclined forward; keel black, except at the tip of the horn, for three-fourths of the length from the head; its tip acute, extending to the tips of the fore-wings: abdomen black, tawny at the tip: legs tawny: fore-wings yellow and thickly punctured for nearly two-thirds of the length from the base, tawny from thence to the tips; veins yellow, tawny towards the tips: hind-wings paler. Length of the body  $3\frac{1}{4}$  lines; of the wings 7 lines.

a. Columbia. From Mr. Turner's collection.

### 15. TRIQUETRA RETICULATA.

*Fulva; prothoracis cornu dorsale quadricarinatum; carina dorsalis flava; pectus nigrum; alae antice fulvae.*

Tawny: fore-chest thickly punctured, here and there slightly pitchy, with a short acute upright horn; four very distinct slightly diverging ridges proceed from this horn, and join one of the longitudinal ridges; the latter are very strongly marked and almost parallel; each shoulder produced into a short compressed conical horn which is broader than long and not inclined forward; keel yellow along the whole length, extending to the tips of the fore-wings, ending in an acute tip: breast black: legs tawny: fore-wings tawny, punctured for more than half the length from the base; veins tawny: hind-wings paler. Length of the body  $3\frac{1}{2}$  lines; of the wings 7 lines.

a. Columbia. From Mr. Turner's collection.

### 16. TRIQUETRA VALIDA, Mas.

*Fulva; cornua lateralia extus nigra; carina dorsalis flava, ferruginea univittata, nigro oblique bivittata, apice nigra; pectus, abdomen, pedes et alae ferrugineae.*

Tawny, pubescent, shining: head transverse, minutely punctured, almost triangular, very much narrower than the fore-chest, impressed on each side of the disk; face with a slight furrow on each side; its hind border rectangular and occupying rather less than half the length of the head: fore-chest roughly punctured, rounded and with a very slight ridge in front where there is a smooth mark on each side; on each shoulder an acute prominent horn whose outer compartment is slightly concave and mostly black; keel yellow, rather deep, convex and with a ferruginous stripe along the ridge for full half the length where it declines, and is straight, shallow and tapering from thence to the tip which is

black and extends beyond the tip of the abdomen ; an oblique short broad black stripe adjoins the ferruginous black stripe on each side : breast, abdomen, legs and wings ferruginous. Length of the body 4 lines ; of the wings 10 lines.

*a.* Mexico. Presented by E. P. Coffin, Esq.

#### 17. TRIQUETRA HEBES, Fem.

*Viridis, lata ; pedes viridi-flavi ; alæ limpide ; alæ anticae basi et ad costam virides.*

Body broad, short, pale green : head transverse, very short, somewhat reticulated, not half the breadth of the fore-chest ; face obconical, not half the length of the head : fore-chest very convex, roughly punctured, slightly ridged ; shoulders conical prominent ; hind part keeled, very acute at the tip, not extending to the tip of the abdomen : legs pale yellow, tinged with green : wings colourless ; veins pale yellow ; fore-wings green and punctured at the base and along part of the fore border. Length of the body 2 lines : of the wings 5 lines.

*a.* Columbia. From Mr. Turner's collection.

#### Genus 14. CERESA.

*Membracis, Fabr., Say, Blanchard.*

*Centrotus, Fabr., Germ.*

*Smilia, Germ., Burm.*

*Ceresa, Amyot et Serv. Hist. Nat. Hém. 539, 433. Fairm.*

Group 1. *Fairm. Ann. Soc. Ent. Fr. 2me Série, iv. 283.*

#### 1. CERESA VITULUS.

*Ceresa vitulus, Amyot et Serv. Hist. Nat. Hém. 540, 1. Fairm Ann. Soc. Ent. Fr. 2me Série, iv. 283, 1.*

*Smilia vitulus, Burm. Handb. Ent. ii. 1, 137, 2.*

*Membracis vitulus, Fabr. Ent. Syst. iv. 14, 25.*

*Centrotus vitulus, Fabr. Syst. Rhyn. 20, 21.*

*Centrotus pallens, Germ. Mag. Ent. iii. 25, 26.*

*Smilia pallens, Germ. Silb. Rev. Ent. iii. 235, 6.*

Brazil.



## 2. CERESA ACULEATA.

*Ceresa aculeata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 283, 2.  
Bolivia.

## 3. CERESA AFFINIS.

*Ceresa affinis*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 284, 3, pl.  
5, f. 21, 22.  
Brazil.

## 4. CERESA TESTACEA.

*Ceresa testacea*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 284, 4.  
Mexico.

## 5. CERESA BOREALIS.

*Ceresa borealis*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 284, 5.  
*a—c.* Nova Scotia. From Lieut. Redman's collection.  
*d.* Canada.

## 6. CERESA SPINIFERA.

*Ceresa spinifera*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 284, 6.  
*a.* Brazil. Presented by John Miers, Esq.  
*b.* Brazil. From Mr. Stevens' collection.  
*c.* Venezuela. From Mr. Dyson's collection.  
*d.* ——— ?

## 7. CERESA USTULATA.

*Ceresa ustulata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 285, 7.  
Brazil.

## 8. CERESA MALINA.

*Ceresa malina*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 285, 8.  
*Smilia malina*, *Germ. Silb. Rev. Ent.* iii. 236, 9.  
*a.* Brazil. From Mr. Mornay's collection.

## 9. CERESA BRUNNICORNIS.

*Ceresa brunnicornis*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 285, 9.

*Smilia brunnicornis*, *Germ. Silb. Rev. Ent.* iii. 235, 7.

Buenos Ayres.

## 10. CERESA AXILLARIS.

*Ceresa axillaris*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 285, 10.

*Smilia axillaris*, *Germ. Silb. Rev. Ent.* iii. 235, 8.

Brazil.

## 11. CERESA DICEROS.

*Ceresa diceros*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 285, 11.

*Membracis diceros*, *Say, Narr. Exp. App. Journ. Acad. Nat. Soc. Philad.*

*Smilia diceros*, *Germ. Silb. Rev. Ent.* iii. 237, 12.

*Ceresa postfasciata*, *Amoyot et Serv. Hist. Nat. Hém.* 540, 2. pl. 10. f. 3.

*a—e.* United States. Presented by E. Doubleday, Esq.

*f.* Nova Scotia. Presented by J. G. Children, Esq.

*g—l.* Nova Scotia. From Lieut. Redman's collection.

## 12. CERESA BASALIS, Mas.

*Nigra, pilosa; caput fulvum nigro trimaculatum; prothorac fulvus, nigro quadrimaculatus; pedes fulvi; femora nigro fasciata; alae antice sublimpidae, basi flavae, apice subfulvae.*

Black, hairy: head tawny, hairy, rugulose, with three black spots; one on each side by the eye; the third in front: eyes prominent: fore-chest tawny, thickly punctured, extending beyond the abdomen, hairy in front, with a black spot on each side of the fore border, rising perpendicularly for some height above the head, and then forming across a nearly right angle, behind which is a triangular flat compartment, and on each side a short acute horn; the compartment formed by the outer side of each horn is triangular, slightly concave, with a black disk; hind part of fore-chest keeled, much compressed, slightly convex, very slender towards the tip, which is black and acute: abdomen obconical; lower appendage at

the tip long, shining, slightly curved upward, with a long tawny style on each side; upper appendages tawny, with a black perpendicular tooth on each side; legs tawny, slender, beset with white bristles; a broad black band on each thigh: wings almost colourless, pale yellow at the base, slightly tawny at the tips; veins tawny. Length of the body 2 lines; of the wings 5 lines.

*a—c.* Nova Scotia. From Lieut. Redman's collection.

### 13. CERESA BREVIS, Fem.

*Testaceus; prothorax apice et pectoris discus nigri; abdomen luteum, apice flavum; pedes lutei; femora nigro subvittata: alæ limpide.*

Testaceous: head transverse, short, scutcheon-shaped above, bordered by a slight rim, finely punctured: fore-chest roughly punctured, extending a little beyond the abdomen, rising perpendicularly high above the head, and then forming a slightly obtuse angle across, behind which is an almost flat triangular curvilinear compartment, whose angle on each side is formed by the humeral horn, which is acute, rather long, and slightly curved backward, and has very concave side-compartments; hind part of fore-chest keeled, convex, much compressed, rather deep, but very slender towards the tip, which is black and acute: breast black about the base of the legs: abdomen luteous, pale yellow at the tip: legs luteous, clothed with whitish hairs; hips black; a slight black mark on each thigh: wings colourless, rather broad; veins pale yellow. Length of the body 3 lines; of the wings  $7\frac{1}{2}$  lines.

*a.* New York.

### 14. CERESA TERMINALIS, Fem.

*Testacea; cornua lateralia longa, apice nigra; prothorax apice niger; alæ limpide.*

Testaceous: head transverse, shining, almost smooth, slightly hairy, somewhat pointed in front, convex in the middle and concave on each side of the hind border: fore-chest thickly punctured, extending nearly to the tip of the abdomen, rising perpendicularly above the head, and then forming across an almost right angle; behind this is a flat triangular curvilinear compartment, whose angle on each side is formed by the humeral horn, which is acute, rather long, with a black tip, hardly curved backward, and has concave

side compartments; hind part of fore-chest deeply keeled, convex, much compressed, very slender towards the tip, which is black and acute: abdomen rather long: wings colourless; veins yellow. Length of the body 4 lines; of the wings  $9\frac{1}{2}$  lines.

a. ———? Presented by the Entomological Club.

### 15. CERESA ALTA, Fem.

*Testacea; cornua lateralialia breviora, apice nigra; prothorax apice niger; alae limpidæ.*

Testaceous: head and fore-chest finely punctured: head transverse, slightly hairy, hardly pointed in front, very slightly convex in the middle and concave on each side of the hind border: fore-chest deep, with a slight middle ridge in front, extending hardly beyond the tip of the abdomen, rising perpendicularly above the head, and there forming across a slightly obtuse angle; behind this a flat triangular curvilinear compartment, whose angle on each side is formed by the humeral horn, which is acute, short, with a black tip, not curved backward, and has hardly concave side-compartments; hind part of fore-chest deeply keeled, convex, compressed, very slender towards the tip, which is black and acute: wings colourless; veins yellow. Length of the body  $3\frac{1}{2}$  lines; of the wings 8 lines.

### 16. CERESA PLANA, Mas et Fem.

*Testacea; cornua humeralia piceo vittata, apice picea; cornu posticum apice piceum; pedes fulvi; femora postica nigra; alae limpidæ; alae anticae margine postico apicem versus fulvae, costae apice fusco maculatae.*

Pale testaceous, shining: head short, transversely subfusiform, nearly as broad as the fore-chest between the shoulders, flat, thinly punctured, slightly rugulose; hind border very slightly undulating; fore border convex; hind part obconical, occupying less than half the length of the head; fore-chest roughly punctured, very slightly ridged, flat in front and rising vertically from the head; fore border slightly undulating; shoulders rounded, not prominent; horns above diverging, almost horizontal, acute, very slightly inclined backward, prismatic, pitchy at their tips, whence a broad pitchy stripe proceeds across the shoulder to the breast; their inner side

broader than the outer side and much broader than the hind side ; length of the horns equal to half the breadth of the chest between them ; hind appendage keeled, extending far beyond the tip of the abdomen, obconical and rather deep from the base to half the length, where it is abruptly attenuated, pitchy and very slender from thence to the tip, which is very acute : legs tawny ; hind-thighs mostly black ; hind-shanks slender, beset with rows of minute black spines ; wings colourless ; fore-wings tawny along the hind border near the tip ; a brown spot near the tip of the fore border ; veins yellow. Length of the body  $2\frac{1}{2}$  lines ; of the wings 6 lines.

a. Brazil. Presented by John Miers, Esq.

b. Brazil. Presented by J. P. G. Smith, Esq.

c—d. Brazil. From Mr. Stevens' collection.

# 17. CERESA SUFFUSA, Fern.

*Testacea ; caput ferrugineum ; prothorax viridis, fuleo varius, ferrugineo fasciatus et vittatus ; pedes ferruginei ; femora picea ; alae limpide ; alae anticae basi viridi-fulvae.*

Testaceous, hardly shining : head short, ferruginous, flat, finely punctured, transversely subfusiform, narrower than the fore-chest between the shoulders ; borders slightly undulating ; hind part of face small, obconical, occupying little more than one-third of the length of the head : fore-chest pale green, partly tawny, roughly punctured, slightly ridged, rising almost vertically from the head ; shoulders rounded, not prominent ; horns above prismatic, diverging, slightly ascending, very slightly curved, almost acute ; their hind side narrower than either of the other sides ; their length rather more than half the breadth of the chest between them ; a ferruginous band from their tips across the chest ; hind appendage keeled, extending a little beyond the tip of the abdomen, slightly tapering from the base to the tip, which is very acute ; ridge ferruginous : legs ferruginous ; thighs pitchy ; shanks widened : wings colourless ; fore-wings punctured, tawny and tinged with green towards the base ; veins green or tawny ; apical areolets numerous. Length of the body 3 lines ; of the wings 7 lines.

a. ——— ?

## 18. CERESA? BUBALUS.

*Membracis Bubalus*, *Fabr. Ent. Syst.* iv. 14, 23.

*Centrotus bubalus*, *Fabr. Syst. Rhyn.* 20, 18.

North America.

## 19. CERESA DISCOLOR.

*Ceresa discolor*, *Spinola MSS. Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 286, 12.

Brazil.

## 20. CERESA BIFASCIATA.

*Ceresa bifasciata*, *Spinola MSS. Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 286, 13.

Brazil.

Group 2. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 286.

## 21. CERESA COLON.

*Ceresa colon*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 286, 14.

*Smilia colon*, *Germ. Silb. Rev. Ent.* iii. 237, 11.

Brazil.

## 22. CERESA CILIATA.

*Ceresa ciliata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 287, 15.

New Granada.

## 23. CERESA TERMINATA.

*Ceresa terminata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 287, 16.

Columbia.

## 24. CERESA TIGRINA.

*Ceresa tigrina*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 287, 17.

Bogota.

## 25. CERESA MORIO.

Ceresa morio, *Faïrm. Ann. Soc. Ent. Fr. 2me Série*, iv. 287, 18.  
Bogota.

## 26. CERESA FLACCIDA.

Ceresa flaccida, *Faïrm. Ann. Soc. Ent. Fr. 2me Série*, iv. 288, 19.  
Bogota.

## 27. CERESA INCRASSATA.

Ceresa incrassata, *Faïrm. Ann. Soc. Ent. Fr. 2me Série*, iv. 288,  
20.

*a, b.* Columbia. From Mr. Jurgens' collection.

*c—h.* Columbia. From Mr. Turner's collection.

## 28. CERESA AURANTIACA.

Ceresa aurantiaca, *Faïrm. Ann. Soc. Ent. Fr. 2me Série*, iv. 288,  
21, pl. 3, f. 22, 23.

Columbia.

Group 3. *Faïrm. Ann. Soc. Ent. Fr. 2me Série*, iv. 289.

## 29. CERESA NERVOSA.

Ceresa nervosa, *Faïrm. Ann. Soc. Ent. Fr. 2me Série*, iv. 289, 22.  
Brazil.

## 30. CERESA CHLOROTICA.

Ceresa chlorotica, *Faïrm. Ann. Soc. Ent. Fr. 2me Série*, iv. 289,  
23.

South America.

## 31. CERESA FEMORATA.

Ceresa femorata, *Faïrm. Ann. Soc. Ent. Fr. 2me Série*, iv. 289, 24.  
Mexico.

## 32. CERESA UNIFORMIS.

*Ceresa uniformis*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 289, 25.

Mexico.

## 33. CERESA APICALIS, Fem.

*Ferruginea; caput nigro maculatum; prothorax nigro flavoque quadrivittatus, apice flavo unifasciatus; femora picea; tibiæ basi piceæ; alæ antice limpidæ, fusco bimarculatæ.*

Ferruginous, obconical: head and fore-chest punctured, shining; head short, transversely subfusiform, almost as broad as the fore-chest, slightly marked with black, somewhat impressed in front: eyes prominent: fore-chest obconical, with a very slight middle ridge, extending nearly to the tip of the abdomen, having on each side behind the base of the wings a short oblique yellow stripe and a long curved black stripe, the latter joins a yellow band which is very near the tip; shoulders obtusely angular, not extending beyond the base of the fore-wings: legs pubescent; thighs pitchy; tibiæ pitchy towards the base: fore-wings colourless, broad, with a large brown spot in the disk and another at the tip; punctured at the base and on the basal costal areolet which is very long; second and third costal areolets small, the second sometimes subdivided; apical areolet almost elliptical: four or five discoidal areolets; membrane very broad along the hind border; veins tawny, punctured with brown, dark brown and clouded at the tips of the wings, slender along the hind borders: hind-wings colourless; veins black. Length of the body 2 lines: of the wings 5 lines.

a. North America. Presented by the Entomological Club.

## Genus 15. SMILIORACHIS.

*Smiliorachis*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 290.

## Group 1.

## 1. SMILIORACHIS BIPUNCTATA.

*Smiliorachis bipunctata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 290, 1.

Brazil.



## 2. SMILIORACHIS BISPINA.

*Smiliorachis bispina*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 290, 2.

Columbia.

## 3. SMILIORACHIS BINOTATA.

*Smiliorachis binotata*, *Lefebvre, MSS. Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 291, 3.

Brazil.

Group 2. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 291.

## 4. SMILIORACHIS VARIEGATA.

*Smiliorachis variegata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 291, 4.

America.

## Genus 16. SMILIA.

*Membracis*, *Germ.*

*Smilia*, *Germ., Burm., Amyot et Serv. Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 291, pl. 5, f. 1.

## 1. SMILIA VAGINATA.

*Smilia vaginata*, *Germ. Silb. Rev. Ent.* iii. 233, 1. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 292, 1.

Brazil.

## 2. SMILIA BRUNNEO-FASCIATA.

*Smilia brunneo-fasciata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 292, 2.

Brazil.

## 3. SMILIA LACCA.

*Smilia lacca*, *Burm. Handb. Ent.* ii. 1, 138, 3.

Bahia.

## 4. SMILIA CAMPESTRIS.

*Smilia campestris*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 292, 3.  
Brazil.

## 5. SMILIA PRASINA.

*Smilia prasina*, *Germ. Silb. Rev. Ent.* iii. 234, 3. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 292, 4.

Brazil.

## 6. SMILIA NIGRO-FASCIATA.

*Smilia nigro-fasciata*, *Lefebvre, MSS. Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 292, 5, pl. 5, f. 2.

Brazil.

## 7. SMILIA DORSATA.

*Smilia dorsata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 293, 6.

Brazil.

## 8. SMILIA FORMICATA.

*Smilia formicata*, *Germ. Silb. Rev. Ent.* iii. 234, 2. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 293, 7.

Brazil.

## 9. SMILIA VITTATIPENNIS.

*Smilia vittatipennis*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 293, 8, pl. 5, f. 3.

Guatemala.

## 10. SMILIA ? SELLATA.

*Smilia sellata*, *Germ. Silb. Rev. Ent.* iii. 234, 4.

## Genus 17. ACONOPHORA.

*Membracis*, *Fabr.*? *Burm.*

*Smilia*, *Germ.*

*Aconophora*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 294.

## 1. ACONOPHORA FLAVIPES.

*Aconophora flavipes*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 294, 1.

*Smilia flavipes*, *Germ. Silb. Rev. Ent.* iii. 238, 16.

*a.* Brazil. Presented by J. G. Children, Esq.

*b, c.* Brazil. From Mr. Mornay's collection.

*d.* ———? From Mr. Birch's collection.

## 2. ACONOPHORA LAMINATA.

*Aconophora laminata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 295, 2.

Mexico.

## 3. ACONOPHORA PUGNAX.

*Aconophora pugnax*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 295, 3.

*Smilia pugnax*, *Germ. Silb. Rev. Ent.* iii. 239, 19.

*S. grisescens*, var. *Germ. Silb. Rev. Ent.* iii. 238, 17.

Brazil.

## 4. ACONOPHORA IMBELLIS.

*Aconophora imbellis*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 295, 4.

Brazil.

## 5. ACONOPHORA TELIGERA.

*Aconophora teligera*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 295, 5.

*Smilia teligera*, *Germ. Mag. Ent.* iv. 21, 18. *Silb. Rev. Ent.* iii. 239, 18.

Brazil.

## 6. ACONOPHORA PUGIONATA.

*Aconophora pugionata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 295, 6.

*Membracis pugionata*, *Germ. Mag. Ent.* iv. 20, 17. *Burm. Handb. Ent.* ii. 1, 135, 2.

*Smilia pugionata*, *Germ. Silb. Rev. Ent.* iii. 238, 15.

*a.* Brazil. From Mr. Stevens' collection.

## 7. ACONOPHORA INCUMBENS.

*Aconophora incumbens*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 295, 7.

*Membracis incumbens*, *Germ.*

*Smilia incumbens*, *Germ. Silb. Rev. Ent.* iii. 239, 20.

*a.* Brazil. Presented by John Miers, Esq.

## 8. ACONOPHORA? XIPHIAS.

*Membracis xiphias*, *Fabr. Syst. Rhyn.* 12, 29.

South America.

## 9. ACONOPHORA? HASTATA.

*Membracis hastata*, *Fabr. Syst. Rhyn.* 13, 33.

South America.

## 10. ACONOPHORA? CURVATA.

*Membracis curvata*, *Fabr. Syst. Rhyn.* 13, 34.

South America.

## 11. ACONOPHORA RUBRIVITTATA.

*Membracis rubrivittata*, *Say.*

*a.* ——— ?

## 12. ACONOPHORA PORRECTA, Fem.

*Flava; caput nigro univittatum, luteo biguttatum; prothorax luteo vittatus; abdomen fusco fasciatum; tibiæ nigro strigatæ; alæ limpide.*

Yellow: head very short, shining, slightly punctured, transversely spindle-shaped; crown slightly undulating in front and behind, very concave in the middle of the fore border for the reception of the face, which is small; hind border with a short black stripe and a luteous dot on each side; eyes prominent: fore-chest roughly punctured, very slightly ridged, prolonged in front of the head into a much compressed conical horn whose length exceeds twice its depth at the base (the horn of *A. rubrivittata* is less than twice its depth), a luteous stripe extends along each side from the tip of the horn to the disk of the fore-chest which has also a few other more indistinct luteous marks and some black impressions in front; shoulders nearly rectangular, slightly prominent; hind part extending nearly to the tip of the abdomen, much attenuated towards the tip, on approaching which its ridge becomes more distinct: hind borders of the abdominal segments brown: tibiæ streaked with black: wings colourless; veins tawny. Length of the body 5 lines; of the wings 8 lines.

*a.* ———? Presented by the Entomological Club.

## 13. ACONOPHORA VIRIDESCENS, Fem.

*Flava; viridi varia, prothorax luteo guttatus; cornu rufo marginatum; tibiæ nigro strigatæ; alæ limpide.*

Yellow: head shining, slightly punctured, very short, transversely subfusiform, undulating in front and behind, clothed with white hairs on the fore border: eyes prominent: fore-chest roughly punctured, partly green, adorned with luteous dots, transversely impressed on each side above the eye, hardly ridged, prolonged in front of the head into a conical much compressed red-edged horn, whose length exceeds twice its depth at the base; shoulders short-conical, slightly prominent; hind part extending nearly to the tip of the abdomen, much attenuated towards the tip which is acute: legs thickly clothed with white hairs: abdomen tinged with green: tibiæ streaked with black: wings colourless: fore-wings punctured, green and with luteous marks at the base and along part of the fore border; veins of the fore-wings thick, pitchy, of the hind-wings slender, tawny. Length of the body  $4\frac{1}{2}$  lines; of the wings 9 lines.

*a.* ———?

## 14. ACONOPHORA NIGRIVITTATA, Fern.

*Flava ; prothoracis cornu rufum nigro marginatum ; alæ limpide.*

Yellow: head shining, finely punctured, very short, transversely subfusiform, slightly undulating in front and behind, clothed with white hairs, much narrower than the fore-chest; fore-chest roughly punctured, slightly ridged, hardly impressed in front, prolonged in front of the head into a conical much compressed horn with a red disk and a black border; its length does not exceed twice its breadth at the base; shoulders very short-conical, hardly prominent; hind part extending far beyond the tip of the abdomen, with slight converging ridges along each side, much attenuated towards the tip which is acute: legs clothed with white hairs: wings colourless; fore-wings tawny and punctured at the base and along part of the fore border; veins tawny. Length of the body  $4\frac{1}{2}$  lines; of the wings 8 lines.

*a—c.* ———? Presented by J. G. Children, Esq.

## 15. ACONOPHORA GUTTIFERA, Mas.

*Viridis ; caput luteo sex-guttatum ; prothorax luteo adpersus, flavo vittatus, anticè nigro bimaculatus, posticè fusco bimaculatus, apice fuscus ; cornu rufo marginatum ; alæ limpide.*

Pale green: head shining, finely punctured, very short, transversely subfusiform, slightly undulating in front and behind, clothed with white hairs, adorned with six luteous dots along the hind border, a little narrower than the fore-chest: eyes prominent: fore-chest roughly punctured, very slightly ridged, speckled with luteous, slightly impressed and with a black mark on each side in front, prolonged in front of the head into a conical compressed horn with a reddish border; its length is less than twice its breadth at the base; shoulders very short-conical, hardly prominent; hind part ending much before the tip of the abdomen, with a brown spot on the border of each side beyond half its length, attenuated towards the tip which is brown and acute; middle ridge pale yellow: legs clothed with white hairs; tibiæ slightly streaked; tarsi brownish: wings colourless; fore-wings punctured, green and partly luteous at the base and along some of the fore border; veins tawny, thick, pitchy towards the tips; veins of hind-wings tawny, slender. Length of the body 4 lines; of the wings  $9\frac{1}{2}$  lines.

*a.* St. John's Bluff, E. Florida. Presented by E. Doubleday, Esq.

## 16. ACONOPHORA MARGINATA, Fem.

*Ferruginea* ; *caput nigro vittatum* ; *prothorax apice niger* ; *cornu nigro marginatum* ; *alæ subferrugineæ*.

Ferruginous: head finely punctured, transverse, of moderate length, a little narrower than the fore-chest, slightly undulating along the hind border, deeply notched in front for the reception of the face, with a black middle stripe which is slightly widened at each end: fore-chest thickly and minutely punctured, slightly ridged, very slightly impressed on each side in front, prolonged in front of the head into an obliquely ascending much compressed horn; this has a broad black rim, and slightly deepens towards the tip which is rounded, its length is about four times its breadth; hind part extending to the tip of the abdomen, much attenuated and with a rather deep keel towards the tip which is black and very acute: legs thinly clothed with short white hairs; hind-shanks beset with minute black spines: wings pale ferruginous, fore-wings punctured at the base and along one-third of the fore border; veins ferruginous; areolets long. Length of the body 5 lines; of the wings  $9\frac{1}{2}$  lines.

a. Mexico. From Mr. Argent's collection.

## 17. ACONOPHORA CONCOLOR, Mas.

*Ferruginea* ; *prothorax anticè nigricans* ; *cornu apice fulrum* ; *pectus, abdomen et femora nigra* ; *tibiæ nigro vittate* ; *alæ subferrugineæ*.

Dark ferruginous, very pubescent: fore-chest thickly and minutely punctured, ridged in front and towards the tip, blackish and slightly impressed on each side in front, prolonged in front of the head into a very slightly ascending much compressed horn; this has a broad rim, is rounded at the tip, and very slightly decreases in depth from the base to the tip, towards which it is tawny and semi-transparent; its length is more than twice its breadth; hind part extending far beyond the tip of the abdomen, much attenuated towards the tip which is very acute: breast and abdomen black: thighs black; tibiæ streaked with black; hind tibiæ beset with minute black spines: wings pale ferruginous; fore-wings punctured at the base, brown along the fore border; veins brown; areolets long. Length of the body 4 lines; of the wings  $7\frac{1}{2}$  lines.

a. Mexico. Presented by E. P. Coffin, Esq.

## 18. ACONOPHORA COMPRESSA, Mas.

*Picea*; *caput nigricans*; *pectus et abdomen nigra*; *pedes ferrugini*; *femora nigro vittata*; *ale subfusce*.

Pitchy, thickly clothed with yellow down: head blackish, transverse, of moderate length, nearly as broad as the fore-chest, very slightly convex along the hind border, tawny on each side of the notch in front: fore-chest thickly and minutely punctured, ridged in front and at the tip, slightly impressed on each side near the fore border, prolonged in front of the head into a conical, hardly ascending, much compressed horn, with a rather broad blackish rim, its length is much less than twice its breadth: hind part extending a little beyond the tip of the abdomen, slightly attenuated towards the tip, which is very acute: breast and abdomen black: legs ferruginous; thighs streaked with black; hind tibiæ beset with minute spines, whose tips are black: wings pale brown; fore-wings slightly punctured at the base; veins pitchy; areolets long. Length of the body 3 lines; of the wings  $6\frac{1}{2}$  lines.

a. Mexico. Presented by E. P. Coffin, Esq.

## 19. ACONOPHORA INTERNA, Fem.

*Fulva*; *prothoracis carina flava*; *cornu utrinque carinatum*; *ale limpidæ*; *ale antice ad costam fulvæ, macula apicali lim-pida*.

Tawny: head punctured, transverse, triangular, very slightly convex along the hind border, deeply notched on the fore border, much narrower than the fore-chest: eyes prominent: fore-chest with a slight yellow ridge, roughly punctured, prolonged into a conical much compressed horn, which is nearly upright and hardly advances in front of the head, its height much exceeds its width, and some slight ridges diverge on each side from its tip to its base; shoulders nearly rectangular, rather prominent; hind part of fore-chest rather deeply keeled, extending to the tip of the abdomen: legs pubescent: wings colourless; fore-wings tawny along the whole length and on half the breadth beneath the fore border, with the exception of a colourless spot near the tip, punctured at the base and along two-thirds of the length of the fore border; veins tawny. Length of the body 3 lines; of the wings 5 lines.

a. Brazil.



## 20. ACONOPHORA OBTUSA, Mas.

*Picea*; *prothorax nigro marginatus*; *pectus, abdomen et pedes ferruginea*; *ale antica piceæ*.

Pitchy, clothed with short, shining, yellow hairs; head and fore-chest minutely punctured: fore-chest conical and compressed in front of the head, with a broad black rim or ridge which widens from the base above and below to the tip; shoulders rounded, not prominent; hind part convex, not keeled, extending beyond the tip of the abdomen, attenuated and with a middle ridge towards the tip, which is acute: breast, abdomen and legs ferruginous: forewings pitchy, slightly rugulose, punctured at the base and along part of the fore border, paler along the hind borders towards the tips; veins stout; areolets long and narrow: hind wings lurid. Length of the body 3 lines; of the wings  $6\frac{1}{2}$  lines.

a. Brazil.

## Genus 18. NESSORHINUS.

*Nessorhinus*, *Amyot et Serv. Hist. Nat. Hém.* 542, 437. *Fairm.*

## 1. NESSORHINUS VULPES.

*Nessorhinus vulpes*, *Amyot et Serv. Hist. Nat. Hém.* 542, 1, pl. 12, f. 11. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 296, 1.

St. Domingo.

## Genus 19. POLYGLYPTA.

*Polyglypta*, *Burm. Handb. Ent.* ii. 1, 142. *Amyot et Serv. Fairm.*

## 1. POLYGLYPTA COSTATA.

*Polyglypta costata*, *Burm. Handb. Ent.* ii. 1, 142, 1. *Silb. Rev. Ent.* iv. 177, 1. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 296, 1.

Mexico.

## 2. POLYGLYPTA PILOSA.

*Polyglypta pilosa*, Germ. MSS. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 296, 2.

Mexico.

## 3. POLYGLYPTA DORSALIS.

*Polyglypta dorsalis*, Burm. *Silb. Rev. Ent.* iv. 178, 2. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 287, 3.

*P. sicula*, Amyot et Serv. *Hist. Nat. Hém.* 541.

a. Mexico. From M. Hartweg's collection.

## 4. POLYGLYPTA BOGOTENSIS.

*Polyglypta Bogotensis*, *Fairm. Ann. Soc. Ent. Fr. 2me Série* iv. 297, 4.

Bogota.

## 5. POLYGLYPTA MACULATA.

*Polyglypta maculata*, Burm. *Silb. Rev. Ent.* iv. 178, 3. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 297, 5.

*P. flavomaculata*, Amyot et Serv. *Hist. Nat. Hém.* 541, pl. 9, f. 9.

Mexico, Bogota, Savannah.

## 6. POLYGLYPTA NIGRIVENTRIS.

*Polyglypta nigriventris*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 297, 6.

Columbia.

## 7. POLYGLYPTA VIRIDIMACULATA.

*Polyglypta viridimaculata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 298, 7.

Columbia.

## 8. POLYGLYPTA PALLIPES.

*Polyglypta pallipes*, *Burm. Silb. Rev. Ent.* xix. iv. 179, 4. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 298, 8.

Columbia, Mexico.

## 9. POLYGLYPTA LINEATA.

*Polyglypta lineata*, *Burm. Silb. Rev. Ent.* iv. 179, 5. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 298, 9.

Mexico.

## 10. POLYGLYPTA NIGELLA.

*Polyglypta nigella*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 298, 10.

Mexico.

## 11. POLYGLYPTA TRIDECIM-COSTATA.

*Polyglypta tridecim-costata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 299, 11.

Mexico.

## 12. POLYGLYPTA STRAMINEA, Fem.

*Flava, perangusta, lanceolata; prothorax multicarinatus, nigro vittatus, apice nigro maculatus; pectoris discus niger; abdomen nigrum, apice subtus ferrugineum; pedes fulvi; alae limpidae; alae anticae nigro vittatae, basi et ad costam fulvae.*

Body lanceolate, very long and narrow: head and fore-chest yellow, shining, thinly clothed with white hairs: head triangular, trilobed, a little broader than long, much narrower than the fore-chest; a furrow between the hind lobes, which are angular in front and impressed on the disks; fore-lobe formed by the face, quadrangular, with a slight furrow along each side of the disk, which is convex; its hind angle occupying nearly half the length of the head: eyes not prominent: fore-chest horizontal, with pale yellow parallel ridges, roughly punctured between the ridges, not keeled, forming in front of the head a horizontal lanceolate horn, which is quadrilateral, has eight ridges, is irregularly striped with black on

each side and beneath, and has a black obtuse tip; hind part ob-lanceolate, extending far beyond the tip of the abdomen, attenuated towards the tip, which is black and acute; with nine ridges, one of which on each side disappears towards the tip; with two black spots on each side and a large annular black mark nearer the tip: breast yellow; disk mostly black: abdomen black, ferruginous at the tip beneath: legs tawny: wings colourless; fore-wings striped with black, tawny and punctured at the base and along part of the fore-border. Length of the body  $6\frac{1}{2}$  lines; of the wings 8 lines.

a, b. Columbia. From M. Jurgens' collection.

c. Columbia. From Mr. Turner's collection.

### 13. POLYGLYPTA BREVVITTA, Mas.

*Ferruginea, perangusta, lanceolata; caput flavum; prothorax flavo et picco maculatus; cornu subtile nigrum flavo trivittatum; pedes ferruginei; alae anticae subcinereae, nigro vittatae, basi et ad costam ferrugineae.*

Body lanceolate, ferruginous, long and narrow, in general structure like that of *P. straminea*, thinly clothed with white hairs: head yellow, shining, almost triangular, slightly trilobed, broader than long, much narrower than the fore-chest; middle furrow indistinct; disks of hind-lobes slightly impressed; fore-lobe with a ferruginous furrow along each side of its convex disk: fore-chest adorned with alternate, irregular, yellow and pitchy marks, roughly punctured between the ridges; horn black beneath, with three yellow stripes extending from the base along part of the length: legs pale ferruginous: fore-wings slightly tinged with gray, striped with black, ferruginous and punctured at the base and along part of the fore border. Length of the body 5 lines; of the wings 6 lines.

a. Venezuela. From Mr. Dyson's collection.

### 14. POLYGLYPTA INTERRUPTA, Mas.

*Nigra, perangusta, lanceolata; caput flavum, nigro varium; prothorax flavo carinatus et bimaculatus; pectus flavo varium; pedes fulvi; alae limpidae; alae anticae nigro vittatae, basi fulvae.*

Body black, lanceolate, long and narrow, in general structure like *P. straminea*: head yellow, triangular, hardly broader than long; disks of hind-lobes mostly black: ridges of the horn yellow

along each side, yellow towards the base beneath and on each side above; ridges of the hind part mostly yellow; two yellow spots between them on each side: breast partly yellow: legs tawny: wings colourless; fore-wings striped with black, tawny and punctured towards the base; veins pale ferruginous. Length of the body 5 lines; of the wings 8 lines.

*a.* Columbia. From Mr. Turner's collection.

## Genus 20. ENTYLIA.

*Membracis*, *Fabr., Germ., Say.*

*Darnis*, *Germ.*

*Entylia*, *Germ. Amyot et Serv. Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 299, pl. 5, f. 28.

*Hemiptycha*, *Burm.*

### 1. ENTYLIA GEMMATA.

*Entylia gemmata*, *Germ. Silb. Rev. Ent.* iii. 248, 1. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 300, 1. pl. 5, f. 30.

*Membracis gemmata*, *Germ. Mag. Ent.* iv. 16, 11.

*a, b.* Columbia. From Mr. Turner's collection.

### 2. ENTYLIA CORNICULATA.

*Entylia corniculata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 300, 2, pl. 5, f. 31.

Venezuela.

### 3. ENTYLIA SINUATA.

*Entylia sinuata*, *Germ. Silb. Rev. Ent.* iii. 248, 2. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 300, 3, pl. 5, f. 29.

*Membracis sinuata*, *Fabr. Ent. Syst. Suppl.* 513, 4. *Syst. Rhyn.* 7, 5.

*Darnis sinuata*, *Germ. Silb. Rev. Ent.* i. 78, 25.

*Hemiptycha sinuata*, *Burm. Handb. Ent.* ii. 1, 140, 5.

North America.

## 4. ENTYLIA BACTRIANA.

*Entylia Bactriana*, *Germ. Silb. Rev. Ent.* iii. 248, 3. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 300, 4, pl. 5, f. 32.

North America.

## 5. ENTYLIA CONCAVA.

*Entylia concava*, *Germ. Silb. Rev. Ent.* iii. 249, 4. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 301, 5.

*Membracis concava*, *Say, Journ. Acad. Nat. Sci. Phil. Exped. App.*

*a.* United States. Presented by the Entomological Club.

*b—c.* United States. Presented by E Doubleday, Esq.

## 6. ENTYLIA CONGISA, Fcm.

*Ferruginea*; *prothoracis carina altè bicristata, utrinque albo interruptè et obliquè fasciata*; *pedes flavi*; *alæ limpide*; *alæ antice basi et ad costam fulvæ.*

Ferruginous: head and thorax roughly punctured: head transverse, almost semicircular, narrower than the fore-chest, slightly impressed with an indistinct middle suture which extends to the face, the hind border of the latter is angular and occupies nearly half the length of the head: shoulders very obtusely angular, not prominent: fore-chest forming two lofty compressed keel-shaped crests which incline towards each other and inclose three-fourths of a circle; the first rises between the shoulders and is truncated at the tip; the second is lower and above the keel; the latter is rather deep and extends far beyond the tip of the abdomen whose sides it embraces; the irregular ridges on the sides of the crests communicate with the ridges of the keel, and the latter has an oblique white interrupted band on each side behind the second crest: breast pitchy: abdomen black; a stripe on each side beneath and the tip yellow: legs yellow: wings colourless: fore-wings tawny at the base and along more than half the length of the fore border; veins pitchy, tawny where the wings are so, pale yellow near the tip of the fore border. Length of the body  $2\frac{1}{2}$  lines; of the wings  $4\frac{1}{2}$  lines.

*Var. β.* Breast and abdomen tawny: white bands of the keel hardly visible.

*Var γ.* Breast and abdomen black; tip of the latter tawny.

*a—c.* St. John's Bluff, E. Florida. Presented by E. Doubleday, Esq.

7. *ENTYLIA DECISA*, Fem.

*Nigra*; caput ferrugineo varium; prothoracis carina altè bicristata, flavo maculata et bifasciata; pectoris discus flavus; abdomen flavo marginatum; pedes flavi; alæ limpide; alæ anticæ basi et ad costam nigrae.

Black, in general structure like *E. concisa*: head partly ferruginous: a yellow spot on the ridge of the keel behind the second crest whence an oblique much interrupted yellow band proceeds on each side to the hind border, two or three yellow dots in the disk on each side: disk of the breast yellow: abdomen yellow with a black disk: legs yellow: fore-wings black and punctured at the base and along the fore border till near the tips where they are colourless with yellow veins. Length of the body  $2\frac{1}{4}$  lines; of the wings 5 lines.

a. St. John's Bluff, E. Florida. Presented by E. Doubleday, Esq.

8. *ENTYLIA ACCISA*, Fem.

*Nigra*; caput ferrugineum; prothorax anticè fulvus; carina bicristata, flavo guttata, apice flava; abdomen subtus apice fulvum; pedes fulvi; alæ limpide; alæ anticæ basi et ad costam nigrae.

Black, in general structure like *E. concisa*: head pale ferruginous, slightly concave on each side in front: fore-chest tawny in front; shoulders slightly prominent; crests rather lower than those of *E. concisa*; some yellow dots on each side of the keel which is wholly bright yellow from the hind part of the second crest to the tip: tip of the abdomen tawny beneath: fore-wings black and punctured at the base and along two-thirds of the fore border, colourless and with yellow veins from thence to the tips. Length of the body  $2\frac{1}{2}$  lines; of the wings 5 lines.

a. North America. Presented by the Entomological Club.

9. *ENTYLIA INCISA*, Fem.

*Testacea*; prothoracis cornu dorsale compressum, truncatum, anticè subflexum; alæ limpide; alæ anticæ basi et ad costam fulvae.

Testaceous: head and fore-chest rather roughly punctured: head triangular, transverse, narrower than the fore-chest, hardly impressed; hind border of the face angular, rather less than half the

length of the head: shoulders almost rounded, not prominent; a much compressed truncated horn between the shoulders, slightly inclined forward, with a dorsal ridge and two more slight ridges on each side; keel behind the ridge convex for a space, then straight and tapering gradually to the tip, extending far beyond the tip of the abdomen whose sides it embraces; ridges on the sides of the keel slight: wings colourless; veins yellow; fore-wings tawny and punctured at the base and along two-thirds of the fore border. Length of the body 2 lines; of the wings  $4\frac{1}{2}$  lines.

a. Brazil. From Mr. Mornay's collection.

#### 10. ENTYLIA INDECISA, Fem.

*Ferruginea; prothorax flavo bivittatus, anticè fulvus, cornu truncato armatus, posticè gibbosus; pectus et abdomen nigra; pedes fulvi; alæ limpide.*

In general structure like *E. concisa*. Head and fore-chest ferruginous: fore-chest partly tawny in front, forming between the shoulders a low compressed truncated horn which has two ridges on each side; behind this is a semicircular concavity, and then the thorax is again gibbous but not so high as in front; the fore-chest has a broad yellow stripe along each side, and the keel is wholly yellow towards the tip: breast and abdomen black; tip of the abdomen tawny: legs tawny: wings colourless; veins yellow. Length of the body  $2\frac{1}{2}$  lines; of the wings 5 lines.

a, b. Trenton Falls, New York. Presented by E. Doubleday, Esq.

#### 11. ENTYLIA REDUCTA, Fem.

*Testacea; prothorax flavo varius, cornu truncato armatus, posticè convexus; pedes flavi; femora nigro vittata; alæ limpide, alæ anticæ basi fulvæ.*

Black: head and fore-chest testaceous, roughly punctured; head transverse, somewhat triangular, but rounded in front, slightly impressed, narrower than the fore-chest; its breadth about twice its length; hind border of the face obtusely angular, occupying nearly half the length of the head: fore-chest slightly marked with pale yellow; shoulders almost rounded, not prominent; horn between them vertical, much compressed, truncated, not higher than broad, with two ridges on each side; behind it the keel is concave for a space, then convex, and lastly declines gradually to the tip, extending far beyond the tip of the abdomen whose sides it embraces:



tip of the abdomen yellow : legs yellow ; thighs striped above with black ; hind tibiæ beset with minute black bristles ; wings colourless ; veins yellow ; fore-wings tawny and punctured along more than half the length from the base. Length of the body  $2\frac{1}{2}$  lines ; of the wings  $4\frac{3}{4}$  lines.

*a.* United States. Presented by E. Doubleday, Esq.

## Genus 21. OXYGONIA.

*Membracis*, *Oliv., Fabr.*

*Entylia*, *Germ.*

*Hemiptycha*, *Burm.*

*Oxygonia*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 301.

Group. 1. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 301.

### 1. OXYGONIA RUFIPES.

*Oxygonia rufipes*, *Spinola, MSS. Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 301, 1, pl. 5, f. 19.

Columbia.

### 2. OXYGONIA CHRYSURA.

*Oxygonia chrysura*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 302, 2, pl. 5, f. 18.

*a, b.* Venezuela. From Mr. Dyson's collection.

### 3. OXYGONIA AURIFLUA, Fem.

*Nigra* ; *caput luteum* ; *prothorax luteo reticulatus* ; *cornu dorsale acutum, utrinque tricarinatum* ; *pectus luteo varium* ; *pedes flavi* ; *femora et tibiæ piceo vittata* ; *metafemora et metatibia picea* ; *alæ anticae subcinereæ, basi et ad costam piceæ.*

Body black : head luteous, triangular, transverse, thinly punctured, hairy in front, much narrower than the fore-chest, impressed on each side near the eyes ; middle suture very distinct, extending to the face, whose hind border is semicircular and occupies much less than half the length of the head : fore-chest roughly punctured, with luteous ridges, on each side in front with some luteous network ; shoulders very prominent, forming rectangular horns ; behind these there is a very acute luteous dorsal horn which inclines slightly

backward, and has three vertical ridges on each side; the fore-chest is nearly horizontal for a space behind this horn and then declines abruptly, and thence is luteous and tapers gradually to the tip which is acute and extends far beyond the tip of the abdomen; it has three ridges of various length on each side: breast partly tawny: abdomen ferruginous at the tip beneath: legs yellow, clothed with short white hairs; thighs and shanks with pitchy stripes; hind-thighs and hind-shanks pitchy: wings pale gray; fore-wings pitchy and punctured at the base and along part of the fore border, colourless and with yellow veins at the tips: veins of the hind-wings black. Length of the body 4 lines; of the wings 8 lines.

*a, b.* Venezuela. From Mr. Dyson's collection.

#### 4. OXYGONIA CONICA.

*Oxygonia conica*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 302, 3.  
Bogota.

#### 5. OXYGONIA PACIFICA.

*Oxygonia pacifica*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 302, 4.  
Brazil.

Group 2. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 203.

#### 6. OXYGONIA DORSALIS.

*Oxygonia dorsalis*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 302, 5.  
Bogota.

#### 7. OXYGONIA MACULICORNIS.

*Oxygonia maculicornis*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv.  
303, 6.  
Bogota.

#### 8. OXYGONIA ERYTHROPUS.

*Oxygonia erythropus*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 303,  
7, pl. 5, f. 17.  
*Hemiptycha erythropus*, *Burm. Handb. Ent.* ii. 1, 139, 2.  
Brazil.

## 9. OXYGONIA RUFIVENTRIS.

*Oxygonia rufiventris*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 304, 8.

*Membracis rufiventris*, *Germ. Mag. Ent.* iv. 14, 8.

*Entylia rufiventris*, *Germ. Silb. Rev. Ent.* iii. 249, 5.

Brazil.

## 10. OXYGONIA SIGNATA.

*Oxygonia signata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 304, 9.

*Membracis signata*, *Germ. Mag. Ent.* iv. 15, 9.

*Entylia signata*, *Germ. Silb. Rev. Ent.* iii. 249, 6.

Brazil.

## 11. OXYGONIA ATROAPTERA.

*Oxygonia atroaptera*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 304, 10.

Brazil.

## 12. OXYGONIA GALEATA.

*Membracis galeata*, *Oliv. Enc. Méth.* vii.

## 13. OXYGONIA MILITARIS.

*Membracis militaris*, *Fabr. Syst. Rhyn.* 15, 39. *Stoll, Cic.* pl. 17, f. 90.

South America.

## 14. OXYGONIA NIMBATA.

*Membracis nimbata*, *Fabr. Syst. Rhyn.* 15, 40.

South America.

## 15. OXYGONIA CULTRATA.

*Membracis cultrata*, *Coqueb. Illustr. Icon.* ii. pl. 18, f. 4. *Fabr. Syst. Rhyn.* 14, 36.

South America.

Group 3. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 304.

## 16. OXYGONIA ALLIACEA.

*Oxygonia alliacea*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 304, 11.

*Entylia alliacea*, *Germ. Silb. Rev. Ent.* iii. 249, 7.

*a—c.* Brazil. Presented by John Miers, Esq.

## 17. OXYGONIA ZEBRINA.

*Oxygonia zebrina*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 305, 12.

Venezuela.

## 18. OXYGONIA VIRIDULA.

*Oxygonia viridula*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 305, 13.

Bogota.

## 19. OXYGONIA ALTIFRONS.

*Fulva*; *prothoracis carina flava, nigro vittata*; *cornu nigrum, conicum*; *abdomen ferrugineum, apice piceum vel nigrum*; *pedes rufi, tibiis tarsisque nonnunquam piceis*; *ala limpida*; *ala antice ad costam picea, macula apicali limpida*; *ala postica ad costae apicem cinerea.*

Body tawny: head triangular, transverse, thinly punctured, hairy in front, pitchy and slightly impressed on the disk, narrower than the fore-chest; middle ridge very indistinct; hind border of the face angular, occupying about half the length of the head: fore-chest roughly punctured, ridged, vertical in front and forming a black conical horn, which sends forth a black stripe to each shoulder. the latter is very obtusely angular and not prominent; three ridges on each side of the horn, from whence the fore-chest forms a bright yellow keel, which extends far beyond the tip of the abdomen, whose sides it embraces; its dorsal ridge is black, and it has seven or eight slight ridges on each side, and is black at the acute tip, and thence along part of the lower border: abdomen ferruginous, pitchy or black towards the tip: legs red; shanks and feet sometimes pitchy: wings colourless: fore-wings punctured at the base and

along half the length beneath the fore border, which is lurid; a broad pitchy stripe proceeds along the fore border to the tip, near which it encloses a colourless spot; hind-wings gray along the fore borders near the tips; veins pitchy, pale yellow towards the hind borders. Length of the body 3—3½ lines; of the wings 7—8 lines.

a. Brazil. Presented by the Entomological Club.

b. South America. Presented by E. Doubleday, Esq.

## 20. OXYGONIA EXTENSA, Mas.

*Nigra, flavo maculata; prothorax utrinque quinque-carinatus; pedes fulvi; femora nigra; alæ subcinereæ; alæ anticæ basi fulvæ, apice fuscæ.*

Body black, obconical: head and fore-chest roughly punctured, adorned with many yellow marks, some of which are confluent: head transverse, almost semicircular, narrower than the fore-chest; borders very slightly undulating; face small, its hind border rounded, not half the length of the head: fore-chest ridged shoulders very obtusely angular, not prominent; keel concealing the abdomen and extending some distance beyond its tip, having on each side five ridges, some of which are forked towards their tips: legs tawny; thighs black: wings pale gray: fore-wings with brown tips, tawny and punctured at the base and along part of the fore border, veins pitchy. Length of the body 1½ line; of the wings 3 lines.

a. United States. Presented by the Entomological Club.

b. Cincinnati. Presented by G. Lea, Esq.

c. Trenton Falls, New York. Presented by E. Doubleday, Esq.

## Genus 22. THELIA.

*Membracis, Fabr., Oliv., Burm.*

*Hemiptycha, Burm., Germ.*

*Atypa? Delaporte.*

*Smilia, Amyot et Serv.*

*Thelia, Amyot et Serv. Fairm. Ann. Soc. Ent. Fr. 2me Série, iv.*

Group 1. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 306.

*Thelia*, *Amyot et Serv. Hist. Nat. Hém.*

### 1. *THELIA* *URSUS*.

*Thelia ursus*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 306, 1, pl. 5, f. 10.

Bogota.

### 2. *THELIA* *MILTOGLYPTA*.

*Thelia miltoglypta*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 306, 2, pl. 5, f. 4, 12.

a. Columbia.

### 3. *THELIA* *PLANEFLAVA*.

*Thelia planeflava*, *Lefebvre MSS. Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 306, 3.

Brazil.

### 4. *THELIA* *PORPHYREA*.

*Thelia porphyrea*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 306, 4.  
North America.

### 5. *THELIA* *VARIA*, *Fem.*

*Flava, nigro vittata; abdomen piceum: pedes fulvi; alæ anticae nigrae, basi fulvae, apice macula limpida subfasciata; alæ posticae limpidae.*

Yellow: head and fore-chest roughly punctured: head triangular, much narrower than the fore-chest, very slightly tuberculate, reddish and hairy about the mouth, whence a black stripe proceeds to the hind border: fore-chest ridged in front, deeply keeled along the back, with an impression on each side by the fore border; shoulders obtusely angular, slightly prominent; between them arises a low conical protuberance, whence a gentle and shallow curve extends backward to another elevation, which rises above the abdomen; thence the fore-chest extends far beyond the tip of the abdo-

men and is attenuated and luteous towards the tip, which is very acute; a black stripe proceeds from the fore border, widens and incloses a diamond-shaped spot in front of the first cone, and a smaller spot on each side of it, and a spindle-shaped spot on the curve, and a small spot on each side of the second cone, and is there interruptedly connected with each side border; three slight ridges on each side: abdomen pitchy: legs tawny: fore-wings black, punctured for more than half the length from the base, tawny towards the base and along the hind border, with a very large oblong colourless spot, which extends almost across the wing from the fore border near the tip; veins pitchy, tawny where the wings are so, yellow in the colourless part; one discoidal arcole: hind-wings colourless. Length of the body  $3\frac{1}{2}$  lines; of the wings 7 lines.

*a, b.* Columbia. From Mr. Turner's collection.

#### 6. *THELIA BIPUNCTA*, Fem.

*Testacea, flavo vittata; humeri lutei; carina rufescens; alæ anticae testaceæ, margine postico nigro maculatæ.*

Testaceous, shining: head transverse, very short, slightly rugulose, almost triangular, with a yellow stripe, pubescent in front, much narrower than the fore-chest; its breadth much more than twice its length: eyes prominent: fore-chest rather thinly punctured, convex and with a yellow stripe in front, very high, almost conical, and with a very deep keel behind the shoulders, which are rectangular, prominent and luteous; keel reddish along its ridge, slightly and transversely rugulose on each side, much attenuated towards the tip, which is very acute, extending far beyond the tip of the abdomen: fore-wings testaceous, punctured at the base along part of the fore border, with a small black spot on the angle of the hind border; veins testaceous; two discoidal areolets: hind-wings paler. Length of the body  $4\frac{1}{2}$  lines; of the wings 10 lines.

*a, b.* Para. From Mr. Stevens' collection.

#### 7. *THELIA SIMILIS*.

*Testacea, nigro vittata; alæ anticae subtestaceæ, margine postico nigro maculatæ.*

Testaceous, shining: head transverse, very short, slightly rugulose, almost triangular, with a black stripe, pubescent in front, much narrower than the fore-chest; its breadth much more than

twice its length: eyes prominent: fore-chest rather thinly punctured, convex and with a black stripe in front, high with a deep keel but not conical behind the shoulders, which are rounded and hardly prominent; keel black along its ridge, slightly and transversely rugulose on each side, extending far beyond the tip of the abdomen, much attenuated towards its tip, which is very acute: fore-wings pale testaceous, punctured at the base and along part of the fore border, with a small brown spot on the angle of the hind border, blackish along the fore border near the tip; veins testaceous; two discoidal areolets: hind-wings almost colourless. Length of the body 4 lines; of the wings 9 lines.

a. Brazil. Presented by John Miers, Esq.

b. Brazil. Presented by the Entomological Club.

c, d. Brazil. From Mr. Mornay's collection.

e. Brazil.

#### 8. THELIA SPINIGERA, Fem.

*Testacea; prothorax viridis; carina testacea vel rufa; alæ antice sublimpidæ, basi et ad costam virides, apice fulvæ.*

Testaceous, shining: head very short, slightly rugulose, transversely semielliptical, much narrower than the fore-chest; its breadth more than thrice its length: eyes not prominent: fore-chest green with a testaceous ridge, punctured, convex in front, very high, almost conical and with a very deep keel behind the shoulders, which are obtusely angular and rather prominent; keel pale red along its ridge, slightly and transversely rugulose on each side, extending a little beyond the tip of the abdomen, concave beneath and very much attenuated towards its tip which is very acute: fore-wings almost colourless, green and punctured at the base and along part of the fore border, tawny towards the tips; veins green, tawny at the tips; two discoidal areolets, the lower one curved, very large: hind-wings colourless. Length of the body 4 lines; of the wings 10 lines.

a. South America. From Mr. Warwick's collection.

#### 9. THELIA CONICA, Mas.

*Fulvo-viridis; prothorax altè carinatus; carina ferrugineo maculata; abdomen fulvum, subtus nigrum; pedes testacei; alæ subfulvæ.*

Green with a tawny tinge, pubescent: head short, very finely punctured, almost transversely elliptical, slightly angular in front



and behind, much narrower than the fore-chest; its breadth full twice its length: eyes prominent: fore-chest ridged, conical, very high and with a very deep keel behind the shoulders, which are rounded and rather prominent; keel with ferruginous marks; fore-chest a little longer than deep, extending far beyond the tip of the abdomen, much compressed but not attenuated towards the tip: abdomen tawny, black beneath from the base along three-fourths of the length with the exception of the hind borders of the segments: legs testaceous, clothed with short white hairs; hind-shanks beset with minute black spines: wings very pale tawny; veins tawny. Length of the body  $3\frac{1}{2}$  lines; of the wings 7 lines.

a. St. John's Bluff, E. Florida. Presented by E. Doubleday, Esq.

#### 10. *THELIA ANGULATA*, Fem.

*Testaceæ; prothoracis humeri apice nigri; carina apicem versus attenuata, nigra; pedes flavi; alæ limpida.*

Testaceous: head transverse, almost triangular, a little narrower than the fore-chest, finely striated along the hind border, hairy in front; its breadth much exceeding its length; fore sides very slightly convex, with pale yellow edges: fore-chest thickly punctured, almost vertical for some height above the head, and forming a transverse obtuse angle between the shoulders, which are slightly prominent and have obtuse angles with black tips; behind the shoulders is an almost flat triangular compartment, and beyond this a rather deep keel whose sides are slightly concave; it extends a little beyond the tip of the abdomen, is slightly concave beneath and much attenuated towards the tip which is black and very acute: legs yellow, clothed with short white hairs: wings colourless; veins yellow; three discoidal areolets. Length of the body 3 lines; of the wings 7 lines.

a. Warm Springs, N. Carolina. Presented by E. Doubleday, Esq.

#### 11. *THELIA SUBSTRIATA*, Mas.

*Testacea; femora nigro vittata; alæ limpida.*

Testaceous: head and fore-chest thickly punctured: head transverse, nearly as broad as the fore-chest, with a slight rim, rather convex behind, very convex in front, with an indistinct suture which is forked in front and extends along each side of the small and almost triangular face; its breadth almost twice its length: eyes prominent: fore-chest rising some height above the head, and then

curved backward but not angular between the shoulders, which are rounded and not prominent; behind the shoulders the keel commences; its sides are flat; it extends to the tip of the abdomen, and is slightly concave beneath and attenuated towards the tip which is acute; a curved furrow on each side, its ends joining the border: a broad black stripe on each thigh: wings colourless; veins pale yellow; four or five discoidal areolets; apical areolets numerous. Length of the body 2 lines; of the wings 6 lines.

*a, b.* St. John's Bluff, E. Florida. Presented by E. Doubleday, Esq.

## 12. *THELIA RUFIVITTA*, Mas.

*Testacea; prothoracis carina rufo bivittata; ventris discus niger; alæ limpide.*

Testaceous: head and fore-chest thickly punctured: head transverse, nearly as broad as the fore-chest, with a slight rim, rather convex behind, very convex in front, with an indistinct suture which is forked in front and extends along each side of the small face; its breadth almost twice its length: eyes prominent: fore-chest indistinctly ridged, rising some height above the head and then curved backward but not angular between the shoulders which are rounded and not prominent; behind the shoulders the keel commences; its sides are flat; it extends to the tip of the abdomen, has a red stripe on each side converging from the shoulder to the tip, is slightly concave beneath and attenuated towards the tip which is acute; curved furrow on each side larger than that of *T. substriata*: disk of the under side of the abdomen black: wings colourless; veins pale yellow. Length of the body 2 lines; of the wings 6 lines.

*a.* St. John's Bluff, E. Florida. Presented by E. Doubleday, Esq.

## 13. *THELIA LUTEA*, Mas et Fem.

*Lutea; prothorax apice niger; pectus nigrum; femora supra nigra; alæ limpide; alæ anticæ basi fulvæ.*

Luteous shining: head punctured, transverse, almost triangular, nearly as broad as the fore-chest; hind border very slightly undulating; fore sides pale yellow, very slightly convex; a slight middle furrow joins the suture on each side of the face whose hind angle occupies half the length of the head, and is enclosed on each side: eyes prominent: fore-chest convex, roughly punctured, forming a keel behind the shoulders, which are rounded and not prominent; keel very slightly concave on each side where there is a slight semi-

circular furrow, concave beneath and much attenuated towards the tip which is black and very acute, extending in the male a little beyond, in the female nearly to, the tip of the abdomen: breast black; thighs black above: wings colourless; veins yellow; fore-wings tawny and punctured at the base of the hind border, pale tawny at the tips; three discoidal arcolets. Length of the body  $2\frac{1}{2}$  lines; of the wings 6 lines.

*Var.* Abdomen black beneath towards the base.

- a. Warm Springs, N. Carolina. Presented by E. Doubleday, Esq.
- b. Trenton Falls, New York. Presented by E. Doubleday, Esq.
- c. North America. Presented by the Entomological Club.
- d. ——— ?

#### 14. THELIA TUMIDA, Fem.

*Lutea, carinae latera flava; abdomen flavum; alae limpidae.*

Luteous, shining: head and fore-chest thickly punctured: head transverse, almost triangular, narrower than the fore-chest, impressed on each side, very slightly undulating on the hind border, rather convex on each side of the front; hind angle of the face very obtuse, occupying less than half the length of the head: fore-chest convex, very slightly ridged in front, forming a keel behind the shoulders, which are obtusely angular and slightly prominent; keel slightly undulating, mostly pale yellow on each side, not attenuated, but embracing the sides of the abdomen and extending far beyond its tip: abdomen pale yellow; oviduct ferruginous: wings colourless; veins yellow: fore-wings punctured at the base and along the borders of the veins nearly to the tips; two or three discoidal arcolets. Length of the body 3 lines; of the wings 6 lines.

- a. St. John's Bluff, East Florida. Presented by E. Doubleday, Esq.

#### 15. THELIA TACTA, Fem.

*Flava; carinae latera flavo maculata; pectus et abdomen picco varia; pedes fulvi; alae limpidae.*

Pale yellow, shining: head transverse, nearly triangular, a little narrower than the fore-chest, slightly rugulose, finely striated between the face and the hind border, which is slightly undulating; fore-sides slightly convex, slightly retuse towards the eyes, which are prominent; a suture extends from the hind border to the face, whose hind angle is slightly obtuse and occupies nearly half the

length of the head: fore-chest roughly punctured, indistinctly ridged, slightly flattened and almost triangular in front, keeled behind the shoulders, which are slightly prominent and very obtusely angular; keel slightly concave and with a semicircular furrow on each side, where there are a few black spots, concave beneath and attenuated towards the tip, which is acute and extends beyond the tip of the abdomen: breast and abdomen partly pitchy: oviduct luteous, pitchy towards the base: legs tawny: wings colourless; veins yellow: fore-wings slightly marked with black towards the base, which is punctured; two discoidal areolets. Length of the body 3 lines; of the wings 7 lines.

a. Mexico. Presented by E. P. Coffin, Esq.

#### 16. THIELIA SEMIFASCIA, Mas et Fem.

Mas. *Flava, fusco-bifasciata; pectus et abdomen nigra; femora supra nigra; alae limpidae; alae anticae basi fulvae, apice fuscae.* Fem. *Carina luteo et albido fasciata; pectus, abdomen et femora fulva.*

Very near allied to *T. tumida*. *Male*. Yellow: head and fore-chest shining: head punctured, transverse, almost triangular, narrower than the fore-chest, slightly undulating along the sides, somewhat impressed on each side; hind border of the face almost semicircular, occupying much less than half the length of the head: fore-chest convex, slightly ridged in front, keeled behind the shoulders, which are rounded and hardly prominent; keel slightly undulating on each side, with two broad, irregular brown bands, not attenuated, but embracing the sides of the abdomen and extending far beyond its tip: breast and abdomen black, tip of the latter ferruginous: thighs black above: wings colourless; veins tawny: fore-wings tawny at the base, punctured at the base and along the veins to the disk, brown at the tips and on the hind border at the base; two discoidal areolets.

*Fem.* Keel with alternate luteous and whitish bands; breast, abdomen and thighs tawny.

Length of the body  $2\frac{1}{2}$  lines; of the wings 6 lines.

a—d. St. John's Bluff, E. Florida. Presented by E. Doubleday, Esq.

Group 2. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 307.

Sub-group 1. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 1.

#### 17. THELIA SCULPTA.

*Thelia sculpta*, *Germar, MSS. Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 307, 5.

North America.

#### 18. THELIA TUBEROSA.

*Thelia tuberosa*, *Germ. MSS. Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 307, 6.

North America.

#### 19. THELIA CAMELUS.

*Thelia camelus*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 308, 7, pl. 5, f. 5, 8, 9.

*Membracis Camelus*, *Fabr. Syst. Rhyn.* 10, 18.

*Smilia centralis*, *Germ. Mag. Ent.* iv. 22, 20. *Silb. Rev. Ent.* iii. 235, 5.

*S. vittata*, *Anyot et Serr. Hist. Nat. Hém.* 539, 1.

*S. fasciata*, *Anyot et Serr. Hist. Nat. Hém.* 539, 2.

a---c. St. John's Bluff, E. Florida. Presented by E. Doubleday, Esq.

#### 20. THELIA PALLIDA.

*Thelia pallida*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 308, 8.

North America.

#### 21. THELIA ANTICA.

*Thelia antica*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 308, 9.

*Hemiptycha antica*, *Germ. Mag. Ent.* iv. 16, 10. *Silb. Rev. Ent.* iii. 247, 6. *Burm. Handb. Ent.* ii. 1, 140, 3.

Brazil.

22. *THELIA CITRINA*.

*Thelia citrina*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 309, 10.  
Columbia.

23. *THELIA BRACTEATA*.

*Thelia bracteata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 309, 11.  
*Membracis bracteata*, *Fabr. Ent. Syst.* iv, 10, 17. *Syst. Rhyn.*  
10, 17.  
Cayenne.

24. *THELIA GALEATA*.

*Thelia galeata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 309, 12.  
*Membracis galeata*, *Fabr. Syst. Rhyn.* 9, 13.  
North America.

25. *THELIA OBTEGENS*.

*Membracis obtegens*, *Fabr. Syst. Rhyn.* 11, 25.  
South America.

Sub-group 2. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 309.

26. *THELIA EXPANSA*.

*Thelia expansa*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 309, 13,  
pl. 5, f. 6, 7.  
*Hemiptycha expansa*, *Germ. Silb. Rev. Ent.* iii. 245, 1.  
*H. eueullata*, *Burm. Handb. Ent.* ii. 1, 140, 4.  
a. Mexico. Presented by the Entomological Club.  
b. Mexico. From Mr. Argent's collection.  
c. Mexico. From M. Hartweg's collection.

27. *THELIA CONSTANS*, Fem.

*Lutea*; *cornua humeralia longa acuta*, *piceo vittata*, *apice nigra*;  
*carina apice nigra*; *pectus flavum*; *abdomen piceo fasciatum*;  
*ala limpidæ*.

Luteous, shining: head transverse, short, almost triangular,  
minutely punctured, finely striated, much narrower than the fore-

chest; hind border convex in the middle, concave on each side, fore-sides nearly straight, slightly retuse; middle suture distinct, extending to the face, whose hind border is almost obconical and occupies less than half the length of the head: fore-chest roughly punctured, vertical like the head, inclined backward, but not angular between the shoulders, which are produced into long acute horns with black tips and with a pitchy stripe on each side of the triangular compartments between their tips and the base of the wings; keel rather deep, black along the ridge towards the tip, with a semicircular furrow on each side, concave beneath towards the tip, which is attenuated and very acute and extends to the tip of the abdomen: breast yellow: hind borders of the abdominal segments pitchy: oviduct black; hips yellow: wings colourless; veins yellow: fore-wings punctured at the base; four discoidal areolets. Length of the body 4 lines; of the wings 10 lines.

a. United States. Presented by the Entomological Club.

Group 3. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 309.

#### 28. *THELIA MONTICOLA*.

*Thelia monticola*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 309, 14, pl. 5, f. 16.

*Membracis monticola*, *Fabr. Syst. Rhyn.* 7, 4.

M. Cissi, *Harris*.

a. United States. Presented by the Entomological Club.

#### 29. *THELIA EXCELSA*.

*Thelia excelsa*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 310, 15. Mexico.

#### 30. *THELIA ACUMINATA*.

*Thelia acuminata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 310, 16, pl. 5, f. 15, *Gmel. Ed. Syst. Nat.* 2094, 67.

*Cicada acuminata*, *Linn.*

*Membracis acuminata*, *Fabr. Ent. Syst.* iv. 11, 13. *Oliv. Enc. Méth.* 665, 21.

*Centrotus acuminatus*, *Fabr. Syst. Rhyn.* 18, 9.

North America.

## 31. THELIA CYRTOPS.

*Thelia cyrtops*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 310, 17,  
pl. 5, f. 13.

*a*—*e* Nova Scotia. From Lieut. Redman's collection.

## 32. THELIA SCALARIS.

*Thelia scalaris*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 311, 18,  
pl. 5, f. 14.

North America.

## 33. THELIA CRISTATA.

*Thelia cristata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 311, 19.  
Mexico.

## 34. THELIA EPHIPPIGERA.

*Thelia ephippigera*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 311,  
20, pl. 5, f. 11.

Columbia.

## 35. THELIA COLLINA, Fem.

*Testacea vel viridi-flava; prothorax apice niger; carina ferruginea vel fulva; alae limpidae; alae anticae basi fulvae.*

Testaceous, shining; head finely punctured, short, almost transversely spindle-shaped, much narrower than the fore-chest, impressed on each side of the disk, with five slight undulations along the hind border, and seven on the fore border; a slight furrow extends from the hind border to the face whose hind side is slightly obconical and occupies less than half the length of the face: fore-chest roughly punctured, convex and with a slight middle ridge in front, forming on each shoulder a conical flat very prominent horn; keel very deep behind the shoulders, conical and slightly inclined forward, veined along the lower side, slightly undulating and declining abruptly along half its length, straight and slightly attenuated from thence to the tip which is black and extends far beyond the tip of the abdomen; ridge mostly ferruginous; sides slightly tumid: wings colourless; veins tawny: fore-wings partly brown along the hind borders



and at the tips, tawny and punctured towards the base. Length of the body 4 lines; of the wings 10 lines.

*a, b.* New York.

*Var. β.* Head and fore part of the fore-chest pale yellow tinged with green: keel tawny, partly green: legs tinged with green: oviduct pitchy, curved.

*a.* St. John's Bluff, E. Florida. Presented by E. Doubleday, Esq.

Group. 4. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 312.

### 36. *THELIA BIMACULATA.*

*Thelia bimaculata*, Amyot et Serv. *Hist. Nat. Hém.* 541. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 312, 21.

*Membracis bimaculata*, Fabr. *Ent. Syst.* iv. 10, 11. *Syst. Rhyn.* 14, 37. *Coq. Ill. Icon.* i. 31, pl. 8, f. 1. Harris, *Ins. New Engl.* 179.

*a.* Warm Springs, N. Carolina. Presented by E. Doubleday, Esq.  
*b.* ———?

### 37. *THELIA UNANIMIS.*

*Fulva, piceo nebuloſa; prothorax anticè cornu porrecto ascendente armatus, poſticè utrinque quinquecarinatus; alæ anticæ limpidae, apice fuſcæ.*

Tawny: head and fore-chest shining, roughly punctured, with irregular pitchy marks; punctures mostly black: head short, transversely subfusiform, much narrower than the fore-chest; face narrow and conical in front, broader and semicircular behind, nearly as long as the head behind it: fore-chest distinctly ridged, armed with a porrect ascending horn which is a little more inclined upward than the keel behind it; the latter extends far beyond the tip of the abdomen, and has five ridges on each side; shoulders prominent, almost rectangular: legs clothed with short white hairs: wings colourless; tips of the fore-wings brown; veins tawny. Length of the body 6 lines; of the wings 11 lines.

*a.* ———? Presented by the Entomological Club.

*b.* ———?

38. *THELIA GLADIATOR*, Fem.

*Ferruginea; prothorax cornu rufo, oblique porrecto, nigro marginato armatus, utrinque apicem versus flavo sexcarinatus; alae subcinereae; alae anticae basi et ad costam ferrugineae.*

Ferruginous: head very short, transversely subfusiform, somewhat depressed, much narrower than the fore-chest; a slight ridge extends along it to the face whose hind part is truncate-conical and occupies half the length of the head: eyes very prominent: fore-chest roughly punctured, convex in front, slightly ridged, keeled behind, impressed towards the fore border, armed above the shoulders with a porrect red obliquely ascending much compressed horn; it has a broad black border on each side, and its length is about thrice its breadth at the base whence it tapers gradually to the tip; shoulders very obtusely angular, slightly prominent; hind part ob-lanceolate, extending far beyond the tip of the abdomen, much attenuated towards the tip which is acute and curved downward; ridges yellow, six on each side of the ridge of the keel which is very shallow: wings pale gray; fore-wings ferruginous and punctured at the base and along part of the fore border, veins ferruginous, very stout; areolets long and narrow. Length of the body 5 lines; of the wings 8 lines.

a. Para. From Mr. Stevens' collection.

39. *THELIA* ———? Mutilated.

—? Presented by J. G. Children, Esq.

40. *THELIA GIBBA*.

*Atypa gibba*, *De Lap. Ann. Soc. Ent. Fr.* i. 221, pl. 6, f. 5.

Genus 23. *HEMIPTYCHA*.

*Membracis*, *Fabr.*, *Oliv.*, *Gmel.*

*Centrotus*, *Fabr.*

*Hemiptycha*, *Germ.*, *Burm.*, *Amyot et Serv.*, *Blanch. Faurm. Ann. Soc. Ent. Fr.* 2me Série, iv. 312.

Group 1.—Sub-group 1. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 312.

### 1. HEMIPTYCHA MARGINATA.

*Hemiptycha marginata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 312, 1, pl. 6, f. 16, 17.

*Membracis marginata*, *Fabr. Mant. Ins.* ii. 263, 14. *Ent. Syst.* iv. 12, 17. *Syst. Rhyn.* 18, 11. *Oliv. Enc. Méth.* vii. 666, 27. *Stoll, Cic.* pl. 11, f. 53, pl. 17, f. 91.

*M. sinopsis*, *Gmel. Ed. Syst. Nat.* 2, 2095, 71.

*M. maculata*, *Oliv. Enc. Méth.* vii. 668, 5.

*a.* Brazil. Presented by John Miers, Esq.

*b.* ——— ?

### 2. HEMIPTYCHA PUNCTATA.

*Var. β.* *Hemiptycha punctata*, *Burm. Handb. Ent.* ii. 1, 139, 1.

*Blanch. Hém.* 184, 1. *Amyot et Serr. Hist. Nat. Hém.* 540.

*Membracis punctata*, *Fabr. Ent. Syst.* iv. 13, 21.

*Centrotus punctatus*, *Fabr. Syst. Rhyn.* 18, 12.

*Hemiptycha Cervus*, *Germ. Silb. Rev. Ent.* iii. 247, 5.

*Darnis scutelligera*, *Less. Ill. Zool.* pl. 55, f. 2.

*a.* Brazil. Presented by John Miers, Esq.

*b.* ——— ? Presented by the Rev. Stuart Taylor.

### 3. HEMIPTYCHA COMPRESSICORNIS.

*Hemiptycha compressicornis*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 313, 3, pl. 6, f. 18.

Bahia.

### 4. HEMIPTYCHA ROTUNDICORNIS.

*Hemiptycha rotundicornis*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 314, 4, pl. 6, f. 25.

*a.* Venezuela. From Mr. Dyson's collection.

## 5. HEMIPTYCHA FURCATA.

*Hemiptycha furcata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 314, 5.  
Bogota.

## 6. HEMIPTYCHA FLAVA.

*Hemiptycha flava*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 314, 6.  
a. ———?

## 7. HEMIPTYCHA LONGICORNIS.

*Hemiptycha longicornis*, *Germar, MSS. Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 315, 7.  
North America.

## 8. HEMIPTYCHA APICALIS.

*Hemiptycha apicalis*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 315, 8.  
*Smilia apicalis*, *Germ. Silb. Ent.* iii. 236, 10.  
Brazil.

## 9. HEMIPTYCHA BIMACULATA.

*Hemiptycha bimaculata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 315, 9.  
Brazil.

## 10. HEMIPTYCHA FLAVO-MARGINATA.

*Hemiptycha flavo-marginata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 315, 10.  
Brazil.

## 11. HEMIPTYCHA XANTHOGRAPHA.

*Hemiptycha xanthographa*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 316, 11.  
*Smilia xanthographa*, *Germ. Silb. Rev. Ent.* iii. 237, 13.  
a. Brazil. Presented by the Entomological Club.

## 12. HEMIPTYCHA BRUNNIVENTRIS.

*Hemiptycha brunniventris*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*,  
iv. 316, 12.

Brazil.

## 13. HEMIPTYCHA PICEA.

*Hemiptycha picea*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 316,  
13.

Brazil.

## 14. HEMIPTYCHA CENTROIDES.

*Hemiptycha centrotoides*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*,  
iv. 317, 14.

a. ———? Presented by the Entomological Club.

## 15. HEMIPTYCHA EXPANSICORNIS.

*Hemiptycha expansicornis*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*,  
iv. 317, 15.

Brazil.

## 16. HEMIPTYCHA ALATA.

*Hemiptycha alata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 317,  
16, pl. 6, f. 24.

Brazil.

## 17. HEMIPTYCHA LONGA, Fem.

*Fusca*; *cornua humeralia trigona, subacuta, apice nigra*; *carina apice nigra, attenuata*; *abdomen supra luteum, nigro interruptè vittatum*; *alæ anticae fuscae*; *alæ posticæ sublimpidæ, ad margines posticos cinereæ.*

Dark brown: head finely punctured, impressed, almost triangular, narrower than the fore-chest; indistinctly ridged: fore-chest roughly punctured, ridged, slightly impressed in front, armed with two very stout triangular almost acute horns, which have black tips

and are very slightly curved; keel impressed on each side behind the horns, ob lanceolate, very long, extending far beyond the tip of the abdomen, black towards the tip, which is very acute: abdomen luteous above, having on each side a broad black stripe, which is interrupted on the hind border of each segment: legs tawny: fore-wings brown, long and narrow; veins yellow: hind-wings almost colourless, gray along the hind borders; veins black. Length of the body 7 lines; of the wings 13 lines.

a. ———? From Mr. Argent's collection.

#### 18. HEMIPTYCHA LATA, Fem.

*Nigra, luteo guttata; abdominis segmentorum margines postici fulvi; alæ anticae nigricantes, ad discos fuscae; alæ posticae cinerae.*

Black, shining: head and fore-chest very broad: head transverse, short, irregularly triangular, finely striated, somewhat impressed, narrower than the fore-chest; hind border undulating; fore borders slightly concave, somewhat retuse; face almost smooth; its hind border semicircular, much less than half the length of the head: fore chest roughly punctured, adorned with luteous dots, slightly impressed in front, very thick, armed on each shoulder with a very stout, triangular, almost pointed horn, whose outer sides are slightly concave and almost angular; the keel behind the horns has two longitudinal furrows, and between them the fore-chest is very convex and much inclined; on their outer sides it is nearly flat and but slightly inclined; opposite the last abdominal segment it is much attenuated and compressed, and extends beyond the tip of the abdomen, from which it slightly diverges: hind borders of the abdominal segments tawny: fore-wings blackish; their disks brown: hind-wings gray; veins black. Length of the body  $5\frac{1}{2}$  lines; of the wings  $13\frac{1}{2}$  lines.

a. ———? From Mr. Argent's collection.

#### 19. HEMIPTYCHA BREVIS, Mas.

*Nigra; ventris segmentorum margines posticè pedesque ferruginei; alæ anticae fuscae, basi nigricantes; alæ posticae subcinerae.*

Black, shining, short: head and fore-chest very broad: head transverse, short, irregularly triangular, striated, impressed, narrower than the fore-chest; hind border undulating; fore borders slightly

convex; face slightly striated across, almost smooth, its hind border obconical, nearly half the length of the head: fore-chest roughly punctured, slightly impressed on each side in front, very thick, armed on each shoulder with a very stout, slightly curved, triangular, almost pointed horn, whose outer sides are slightly concave; the keel behind the horns is rounded and very convex between the longitudinal furrows, and on their outer sides it is nearly flat and but slightly inclined; opposite the penultimate abdominal segment it is abruptly attenuated and forms a spine, which extends beyond the tip of the abdomen: hind borders of the abdominal segments ferruginous beneath: legs ferruginous, stout; anterior thighs armed beneath with a double row of minute black spines; fore-wings brown, blackish at the base: hind-wings slightly tinged with gray. Length of the body 4 lines; of the wings 11 lines.

a. ———? Presented by the Entomological Club.

## 20. HEMIPTYCHA APICALIS, Fem.

*Testacea; carina attenuata, apice nigra; alæ limpidæ, apice fuscae; alæ anticae ad costam subtestaceæ.*

Testaceous: head very short, irregularly triangular, indistinctly striated, slightly impressed, nearly as broad as the fore-chest; hind border undulating; fore borders very slightly concave; hind border of the face semicircular, occupying less than half the length of the head: fore-chest punctured, convex, broad, armed with two very long and acute diverging and obliquely ascending horns; a longitudinal furrow on each side of the keel, which is much attenuated towards the black acute tip, and extends to the tip of the abdomen: wings colourless with brown tips; fore-wings slightly testaceous along the fore border; veins yellow; veins of the hind-wings black. Length of the body  $4\frac{1}{2}$  lines; of the wings 9 lines.

a. ———?

## 21. HEMIPTYCHA VIRIDISSIMA.

*Testacea; cornua humeralia apice nigra; carina latè viridis, ferrugineo vittata, nigro bimaculata, apicem versus attenuata lutea, apice nigra; alæ anticae fuscae.*

Testaceous: head transverse, a little broader than long, irregularly triangular, almost smooth, slightly impressed, much narrower than the fore-chest; borders slightly convex; hind border of

the face obconical, rather less than half the length of the head : fore-chest broad, convex, punctured, slightly ridged, armed on each shoulder with a stout, conical, diverging, horizontal horn, whose tip is black ; keel behind the horns rather deep, bright pale green, with a longitudinal furrow on each side, and with a ferruginous dorsal ridge which terminates on each side in a black discoidal spot, beyond this the keel is attenuated, luteous with a black acute tip, and extends much beyond the tip of the abdomen ; fore-wings brown ; veins ferruginous. Length of the body 6 lines ; of the wings 12 lines.

a. Mexico. Presented by the Entomological Club.

Sub-group 2. *Fairm. Ann. Soc. Ent. Fr. 2me Série, iv. 318. B.*

## 22. HEMIPTYCHA PUNCTUM.

*Hemiptycha punctum*, *Fairm. Ann. Soc. Ent. Fr. 2me Série, iv. 318, 17, pl. 6, f. 22.*

Brazil.

## 23. HEMIPTYCHA LÆVIGATA.

*Hemiptycha lævigata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série, iv. 318, 18.*

Brazil.

Group 2. *Fairm. Ann. Soc. Ent. Fr. 2me Série, iv. 318.*

## 24. HEMIPTYCHA PLACIDA.

*Hemiptycha placida*, *Germ. Silb. Rev. Ent. iii. 246, 4. Fairm. Ann. Soc. Ent. Fr. 2me Série, iv. 318, 19.*

Brazil.

## 25. HEMIPTYCHA GLOBICEPS.

*Hemiptycha globiceps*, *Fairm. Ann. Soc. Ent. Fr. 2me Série, iv. 319, 20, pl. 6, f. 20.*

Mexico.



## 26. HEMIPTYCHA CAMELUS.

*Hemiptycha camelus*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 319, 21, pl. 6, f. 21.

*Darnis camelus*, *G. R. Gray, Griff. Anim. Kingd. Ins.* ii. 260, pl. 109, f. 3.

*Hemiptycha sagata*, *Germ. Silb. Rev. Ent.* iii.

Mexico.

## 27. HEMIPTYCHA ASPHALTINA.

*Hemiptycha asphaltina*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 319, 22, pl. 6, f. 20.

Mexico.

## 28. HEMIPTYCHA CUNEATA.

*Hemiptycha cuneata*, *Germ. Silb. Rev. Ent.* iii. 246, 3. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 319, 23, pl. 6, f. 26.

Mexico.

## Genus 24. DARNIS.

*Membracis*, *Fabr., Olive.*

*Darnis*, *Fabr., Germ., Burm., Amyot et Serv. Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 479, 20.

## 1. DARNIS CYCLOPS.

*Darnis cyclops*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 479, 1. Columbia.

## 2. DARNIS FLAVICEPS.

*Darnis flaviceps*, *Burm. Silb. Rev. Ent.* iv. 169, 1. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 480, 2.

Brazil.

## 3. DARNIS AFFINIS.

*Darnis affinis*, *Guérin, Icon. Règn. Anim. texte 364, Ins. pl. 59, f. 2. Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 480, 3.

a—c. Brazil.

## 4. DARNIS ADUSTA.

*Darnis adusta*, *Burm. Silb. Rev. Ent.* iv. 170, 2. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 480, 4.

Mexico.

## 5. DARNIS LATERALIS.

*Darnis lateralis*, *Fabr. Syst. Rhyn.* 27, 6. *Coq. Ill. Icon.* pl. 18, f. 9. *Germ. Mag. Ent.* iv. 11, 1. *Silb. Rev. Ent.* iii. 250, 1. *Burm. Silb. Rev. Ent.* iv. 170, 3. *Blanch. Hist. Nat. Ins.* iii. 185, 2. *Amgot et Serv. Hist. Nat. Hém.* 545, 1. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 480, 5. *Crochard, Ed. Règne Anim. Ins.* pl. 8, f. 3.

Brazil, Cayenne.

## 6. DARNIS PRÆCOX.

*Darnis præcox*, *Burm. Silb. Rev. Ent.* iv. 173, 9. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 480, 6.

Mexico.

## 7. DARNIS BIPUNCTATA.

*Darnis bipunctata*, *Burm. Silb. Rev. Ent.* iv. 171, 4. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 480, 7.

Mexico.

## 8. DARNIS STRIGIFRONS.

*Darnis strigifrons*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 481, 8.

Mexico.

## 9. DARNIS TRIFASCIATA.

*Darnis trifasciata*, *Fabr. Syst. Rhyn.* 28, 7. *Burm. Silb. Rev.* iv. 171, 5. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 481, 9.  
*D. suturalis*, *Germ. Silb. Rev. Ent.* iii. 250, 2.

Brazil.

## 10. DARNIS TRICINCTA.

*Darnis tricincta*, *Burm. Silb. Rev. Ent.* iv. 172, 6. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 481, 10.

Brazil.

## 11. DARNIS CAPISTRATA.

*Darnis capistrata*, *Burm. Silb. Rev. Ent.* iv. 172, 7. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 481, 11.

*D. bifasciatus*, *Amyot et Serv. Hist. Nat. Hém.* 545, pl. 11, f. 7.  
Cayenne.

## 12. DARNIS CRUENTA.

*Darnis cruenta*, *Burm. Silb. Rev. Ent.* iv. 173, 8. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 481, 12.

Brazil.

## 13. DARNIS ACUTULA.

*Darnis acutula*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 481 13.  
South America.

## 14. DARNIS PRASINA.

*Darnis prasina*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 482, 14.  
Venezuela.

## 15. DARNIS TRIPARTITA, Mas.

*Testacea*; *carina utrinque ferrugineo maculata, apice ferruginea*; *pectus flavum, piceo maculatum*; *pedes ferruginei*; *femora et tibiæ flavo maculata*; *alæ anticae fulvae, macula costali limpida, apice fuscae*; *alæ posticae limpidae*.

Body testaceous: head and fore-chest broad, shining, hairy, finely punctured: head short, flat, narrower than the fore-chest; its breadth more than twice its length; hind border undulating; fore borders very obtusely angular on each side near the face which is small, and forms an acute angle in front; its hind border is semi-circular, and much less than half the length of the face: fore-chest very convex, indistinctly ridged, slightly impressed on each side in

front; shoulders rounded, not prominent; keel extending beyond the tip of the abdomen whose sides it embraces, with two very large triangular ferruginous spots which are divided by its ridge; tip ferruginous, acute: breast yellow, with some pitchy spots on each side: legs ferruginous; thighs and shanks adorned with numerous yellow dots, clothed with white hairs: fore-wings tawny, punctured at the base and along two-thirds of the fore border where there is a colourless spot; tips brown: hind-wings colourless; veins ferruginous. Length of the body 3 lines; of the wings 8 lines.

a. St. John's Bluff, E. Florida. Presented by E. Doubleday, Esq.

#### 16. DARNIS STUPIDA, Mas et Fem.

*Picea* (mas) *vel ferruginea* (fem), *flavo guttata*; *pedes picci, flavo guttati, subtus ferruginei*; *alæ limpidæ*; *alæ anticæ basi et ad costam fulvæ, apice fuscæ*.

Head and fore-chest of the male pitchy, of the female ferruginous, shining, punctured, adorned with numerous yellow dots: head transverse, short, flat, slightly impressed, narrower than the fore-chest, pitchy on each side in front; hind border undulating; fore borders very slightly retuse; face small, truncate, obconical, much less than half the length of the head: fore-chest convex, indistinctly ridged, concave on each side behind the shoulders which are rounded and hardly prominent; keel rounded, tapering from the base to the tip which is angular and acute, extending far beyond the tip of the abdomen whose sides it embraces; a narrow pale yellow spot on the middle of the lower border, smaller in the male than in the female: breast of the male black with yellow spots: breast of the female yellow, adorned with black spots on each side: abdomen of the male pitchy; hind borders of the segments yellow: abdomen of the female tawny, pitchy on each side beneath: legs pitchy, adorned with yellow dots, ferruginous beneath, clothed with short white hairs: wings colourless; fore-wings with brown tips, punctured and tawny at the base and along part of the fore border; veins tawny. Length of the body  $2\frac{3}{4}$ — $3\frac{1}{2}$  lines; of the wings  $5\frac{1}{2}$ — $7\frac{1}{2}$  lines.

*Var. β. Fem.* Spot on the lower border of the fore-chest triangular: breast wholly yellow: legs ferruginous; thighs tawny.

*Var. γ.* Fore-wings ferruginous with the exception of a colourless spot beyond two-thirds of the length of the fore border.

a. North America. Presented by the Entomological Club.

b—i. Nova Scotia. From Lieut. Redman's collection.

Group 2. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 482.

17. DARNIS SQUARUS.

*Darnis squarus*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 482, 15, pl. 5, f. 22.

Cayenne.

18. DARNIS CONVOLUTA.

*Darnis convoluta*, *Burm. Handb. Ent.* ii. 1, 141, 2. *Germ. Silb. Rev. Ent.* iii. 251, 4. *Burm. Silb. Rev. Ent.* iv. 174, 11. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 482, 16.

*Membracis convoluta*, *Fabr. Ent. Syst.* iv. 15, 28. *Syst. Rhyn.* ii. 24. *Oliv. Enc. Méth.* vii. 664, 12.

*Var. M. flavicincta*, *Germ. Mag. Ent.* iv. 12, 2. *Silb. Rev. Ent.* iii. 251, 3.

*Var. M. atomaria*, *Germ. Mag. Ent.* iv. 12, 3.

a. Brazil. Presented by John Miers, Esq.

b. Brazil. From Mr. Shuckard's collection.

c—c. Brazil.

19. DARNIS LIMACODES.

*Darnis limacodes*, *Burm. Silb. Rev. Ent.* iv. 175, 12, pl. 36, f. 13. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 483, 17.

Brazil.

20. DARNIS BREVIS.

*Darnis brevis*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 483, 18. Mexico.

21. DARNIS LIMBATA.

*Darnis limbata*, *Burm. Silb. Rev. Ent.* iv. 173, 10. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 483, 19.

a. Brazil. Presented by John Miers, Esq.

b. ———? Brazil. Presented by J. G. Children, Esq.

c—c. ———?

## 22. DARNIS OLIVACEA.

*Darnis olivacea*, *Fabr. Syst. Rhyn.* 28, 8. *Burm. Handb. Ent.* ii. 1, 141, 1. *Silb. Rev. Ent.* iv. 176, 13. *Faïrm. Ann. Soc. Ent. Fr. 2me Série*, iv. 483, 20.

*Var. ?* *D. pallescens*, *Fabr. Syst. Rhyn.* 28, 9.

*a.* Brazil. Presented by the Entomological Club.

*b.* Brazil. Presented J. G. Children, Esq.

## 23. DARNIS LATICAUDA.

*Darnis laticauda*, *Faïrm. Ann. Soc. Ent. Fr. 2me Série*, iv. 483, 22. Brazil.

## 24. DARNIS APICALIS.

*Darnis apicalis*, *Faïrm. Ann. Soc. Ent. Fr. 2me Série*, iv. 483, 23. Brazil.

## 25. DARNIS ROBUSTA, Mas.

*Testacea ; pectus nigro varium ; abdominis segmentorum margines posticè et apex rufescentes ; femora et tibiæ nigro varia ; alæ antice subfuscae, basi flavae, apice fuscae, ad costam nigro vittate.*

Body testaceous : head and fore-chest broad, shining, pubescent : head transverse, flat, very short, much narrower than the fore-chest ; its breadth more than four times its length ; fore border and hind border very slightly undulating : fore-chest very convex, very minutely rugulose ; shoulders obtusely angular, slightly prominent ; keel rounded, rather deep, extending beyond the tip of the abdomen, whose sides it embraces, angular above towards the tip, which is acute : breast partly black : hind borders of the segments of the abdomen and its tip reddish : thighs and shanks striped or marked with black : fore-wings pale brown, with dark brown tips, pale yellow at the base, having along the fore border a black stripe beneath, and beyond which they are reddish. Length of the body 6 lines ; of the wings 12 lines.

*a.* Pará. From Mr. Stevens' collection.

## Genus 25. TRAGOPA.

*Membracis*, *Oliv.*, *Coqueb.*

*Darnis*, *Fabr.*, *Blanch.*

*Tragopa*, *Latr.*, *Germ.*, *Burm.* *Amyot et Serv.*, *Fairm.*

Group 1. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 484.

## 1. TRAGOPA AURICULATA.

*Tragopa auriculata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 484, 1.

*Membracis auriculata*, *Oliv. Enc. Méth.* vii. 668, 10.

*Darnis vespertilio*, *Fabr. Syst. Rhyn.* 26, 2. *Stoll, Cicad.* pl. 8. f. 38.

*Tragopa vespertilio*, *Burm. Silb. Rev. Ent.* iv. 185, 2.

Cayenne.

## 2. TRAGOPA CIMICOIDES.

*Tragopa cimicoides*, *Burm. Handb. Ent.* ii. 1, 143, 2. *Silb. Rev.*

*Ent.* iv. 185, 1. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 485, 2, pl. 7, f. 1.

*Membracis cimicoides*, *Coqueb. Illust. Icon.* ii. pl. 18, f. 6.

*Darnis cimicoides*, *Fabr. Syst. Rhyn.* 25, 1.

Var. D. *Melanostigma*, *Perty, Del. Anim. Artic.* 179, pl. 35, f. 13.

a. *Parà.* From Mr. Stevens' collection.

## 3. TRAGOPA ALACRIS.

*Tragopa alacris*, *Klug. Burm. Silb. Rev. Ent.* iv. 186, 3. *Fairm.*

*Ann. Soc. Ent. Fr. 2me Série*, iv. 485, 3.

*Parà.*

## 4. TRAGOPA TETYRIDES.

*Rufa*, *nitens*, *subglabra*; *prothorax apice*, *pectus*, *abdomen et pedes testacea*; *alæ limpide*; *alæ anticae basi et apice cinerea*.

Body testaceous, short, broad: head and fore-chest pale red, shining, almost smooth: head small, transverse, short, not half the breadth of the fore-chest, slightly impressed in front; hind border straight; fore border slightly retuse: fore-chest very convex, dilated

on each side between the eyes and the shoulders, which are rectangular and prominent; hind part testaceous, short-obconical, not ridged: wings colourless; fore-wings gray at the base and towards the tips. Length of the body  $1\frac{3}{4}$  line; of the wings 3 lines.

a. British Guiana. Presented by Sir R. Schomburgk.

Group 2.—Sub-group 1. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 485.

5. TRAGOPA NITIDA.

*Tragopa nitida*, *Germ. Silb. Rev. Ent.* iii. 309. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 485, 4.

Brazil.

6. TRAGOPA ÆNEA.

*Tragopa ænea*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 486, 5.  
*Darnis ænea*, *Perty, Del. Anim. Art.* 179, pl. 35, f. 12.

Brazil.

7. TRAGOPA BAJULUS.

*Tragopa bajulus*, *Germ. Silb. Rev. Ent.* iii. 309. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 486, 6.

Brazil.

8. TRAGOPA MARMOREA.

*Tragopa marmorea*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 486, 7.

Chiquita.

9. TRAGOPA PUNCTATISSIMA.

*Tragopa punctatissima*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 486, 8.

Cayenne.



## 10. TRAGOPA COCCINELLA.

Tragopa coccinella, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 486,  
9.

Chiquita.

## 11. TRAGOPA DOHRNI.

Tragopa Dohrni, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 487, 10,  
pl. 5, f. 8.

Santa Cruz.

## 12. TRAGOPA ANNULATA.

Tragopa annulata, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv.  
487, 11.

Darnis annulata, *Fabr. Syst. Rhyn.* 27, 5.

South America.

## 13. TRAGOPA DIMIDIATA.

Tragopa dimidiata, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 487,  
12.

Cayenne.

## 14. TRAGOPA BIPARTITA.

Tragopa bipartita, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 487,  
13.

Cayenne.

## 15. TRAGOPA FUNERULA.

Tragopa funerula, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 488,  
14.

Cayenne.

Sub-group 2. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 488.

16. TRAGOPA FULVOVARIA.

*Tragopa fulvovaria*, *Lefebvre, MSS. Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 488, 15.

Brazil.

17. TRAGOPA FRONTALIS.

*Tragopa frontalis*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 489, 16, pl. 5, f. 2.

Brazil.

18. TRAGOPA ALBIMACULA.

*Tragopa albimacula*, *Germ. Silb. Rev. Ent.* iii. 252, 3. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 489, 17.

*Membracis albimacula*, *Germ. Mag. Ent.* iv. 14, 6.

*Tragopa bistriata*, *Klug, Burm. Silb. Rev. Ent.* iv. 188, 6.

Brazil.

19. TRAGOPA HUMERALIS.

*Tragopa humeralis*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 489, 18.

Brazil.

20. TRAGOPA GLOBUS.

*Tragopa globus*, *Germ. Silb. Rev. Ent.* iii. 251, 1. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 489, 19.

*Membracis globus*, *Germ. Mag. Ent.* iv. 12, 4.

*Tragopa sacrata*, *Burm. Silb. Rev. Ent.* iv. 186, 4.

Brazil.

21. TRAGOPA OBLIQUA.

*Tragopa obliqua*, *Germ. Silb. Rev. Ent.* iii. 251, 2. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 489, 20.

*Membracis obliqua*, *Germ. Mag. Ent.* iv. 13, 5. *Stoll, Cic.* pl. 15, f. 81.

*Tragopa sacrata*, *Burm. Silb. Rev. Ent.* iv. 186, 4.

Brazil.

## 22. TRAGOPA INVOLUTA.

*Tragopa involuta*, *Burm. Silb. Rev. Ent.* iv. 187, 5. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 490, 21.

*Darnis involuta*, *Fabr. Syst. Rhyn.* 27, 4. *Coq. Ill. Icon.* pl. 18, f. 7.  
Brazil.

## 23. TRAGOPA MORIO.

*Darnis morio*, *Fabr. Syst. Rhyn.* 26, 3.

*T. cimicoides*, var. ?

South America.

## 24. TRAGOPA OVALIS.

*Tragopa ovalis*, *Klug, Burm. Silb. Rev. Ent.* iv. 188, 7. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 490, 22.

Parà.

## 25. TRAGOPA XANTHOCEPHALA.

*Tragopa xanthocephala*, *Germ. Silb. Rev. Ent.* iii. 252, 4. *Burm. Silb. Rev. Ent.* iv. 189. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 490, 23.

*Membracis xanthocephala*, *Germ. Mag. Ent.* iv. 14, 7.

Brazil.

## 26. TRAGOPA CYANEA.

*Tragopa cyanea*, *Klug, Burm. Silb. Rev. Ent.* iv. 189, 9. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 490, 24.

Parà.

## 27. TRAGOPA TRIPARTITA.

*Tragopa tripartita*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 490, 25.

Cayenne.

## Genus 26. PARMULA.

Parmula, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 490.

Entylia? *German.*

## 1. PARMULA BISTRIGATA.

Parmula bistrigata, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 491, 1.  
Columbia.

## 2. PARMULA VERTEBRALIS.

Parmula vertebralis, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 491, 2.  
South America.

## 3. PARMULA GIBBULA.

Parmula gibbula, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 491, 3.  
Brazil.

## 4. PARMULA? LONGULA.

Entylia longula, *Klug, Burm. Handb. Ent.* ii. 1, 143, 1.  
Parà.

## Genus 27. HORIOLA.

Darnis, *Fabr., Perty.*

Tragopa, *Burm., Amyot et Serv.*

Horiola, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 492, pl. 7, f. 11,  
13, 14.

## 1. HORIOLA PICTA.

Horiola picta, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 492, 1.

Tragopa picta, *Burm. Handb. Ent.* ii. 141, 1. *Silb. Rev. Ent.* iv.  
189, 1. *Amyot et Serv. Hist. Nat. Hém.* 546, 1. *Crochard,*  
*Ed. Rég. Anim. Ins.* pl. 98, f. 2.

Darnis picta, *Fabr. Syst. Rhyn.* 29, 11. *Blanch. Hist. Nat. Ins.*  
iii. 185, 4.

*Membracis picta*, *Coq. Ill. Icon.* ii. 78, pl. 23, f. 10. *Stoll, Cic.* 67, pl. 16, f. 89.

*Darnis elegantula*, *Perty, Del. An. Art.* 178, pl. 35, f. 11.

*Tragopa elegantula*, *Burm. Silb. Rev. Ent.* iv. 191, 14.

*a—c.* Parà. From Mr. Stevens' collection.

## 2. HORIOLA LINEOLATA.

*Horiola lineolata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 492, 2. Cayenne.

## 3. HORIOLA FERRUGINEA.

*Horiola ferruginea*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 493, 3. Brazil.

## 4. HORIOLA ANDREÆ.

*Tragopa Andreæ*, *Burm. Silb. Rev. Ent.* iv. 190, 11. Parà.

## 5. HORIOLA CHI.

*Tragopa Chi*, *Burm. Silb. Rev. Ent.* iv. 190, 12. Parà.

## 6. HORIOLA EPHIPPIMUM.

*Tragopa ephippium*, *Burm. Silb. Rev. Ent.* iv. 191, 13. Central America.

## 7. HORIOLA SEMIVITTA, Fem.

*Nigra; caput subferrugineum; pectus et abdomen ferruginea, hoc basi cervinum; pedes ferruginei; alæ luridæ.*

Body black: head and fore-chest punctured, shining: head somewhat ferruginous, transverse, short, narrower than the fore-chest, slightly impressed; borders slightly undulating; fore sides forming an angle: fore-chest very convex, adorned along each side with a yellow stripe which widens and ascends to the middle of the keel; shoulders obtusely angular, not prominent; keel extending beyond the tip of the abdomen, ridged and abruptly attenuated

towards the tip which is very acute: breast and abdomen ferruginous; abdomen fawn-colour towards the base; legs ferruginous, clothed with tawny hairs: wings lurid; stigma of fore-wings black; veins ferruginous, yellow towards the tips. Length of the body 4 lines; of the wings 10 lines.

a. Columbia. From Mr. Turner's collection.

#### HORIOLA TRIGONA, Mas et Fem.

*Nigra; caput flavo bifasciatum; prothorax flavo marginatus; pectus nigro maculatum; pedes fulvi; alæ limpide.*

Body yellow: head and fore-chest black, shining, very finely punctured: head transverse, short, a little narrower than the fore-chest, adorned in front with two yellow bands which are united on each side: border of the fore-chest yellow with the exception of a black spot near each eye, and a pitchy stripe along each lower border: shoulders almost rounded, not prominent; hind part of the keel ridged, attenuated, extending to the tip of the abdomen, with a short black dorsal stripe and an acute black tip: a few black spots on the breast: legs tawny, middle shanks sometimes striped with black: wings colourless; veins pale yellow: fore-wings punctured at the base and along part of the fore border. Length of the body 2 lines; of the wings 5 lines.

a. Columbia. From Mr. Jurgens' collection.

b, c. Columbia. From M. Turner's collection.

#### 9. HORIOLA COMPOSITA, Fem.

*Nigra; caput nigrum, flavo cinctum; prothorax flavo trivittatus; pedes picei vel nigri, flavo cincti; alæ limpide; alæ antica fusco variae.*

Body black, shining: head yellow, transverse, almost smooth, slightly impressed, narrower than the fore-chest; hind border almost straight; fore border convex, with a black spot on each side: disk mostly black: fore-chest thickly punctured, much excavated behind the shoulders, which are very obtusely angular and not prominent, adorned with one dorsal and two lateral, irregular, yellow stripes: legs pitchy or black, with yellow bands: wings colourless: fore-wings mottled with brown; veins pitchy, robust. Length of the body  $1\frac{1}{2}$  line; of the wings 3 lines.

a. Venezuela. From Mr. Dyson's collection.

10. *HOMIOLA LATIFRONS*, Fem.

*Nigra*; *capitis latera antica fulvo maculata*; *prothorax posticè flavus*; *abdomen flavum*; *pedes flavi*; *tibiæ basi et femora nigra*; *alæ sublimpidæ*; *alæ anticæ basi nigra*.

Body black, shining: head transverse, short, narrower than the fore-chest, tawny on each side in front: fore-chest convex; shoulders obtusely angular, not prominent; hind part yellow, attenuated, acute, not extending to the tip of the abdomen, which is yellow: legs yellow; shanks towards the base and thighs black: wings almost colourless; veins pale yellow; fore-wings black at the base. Length of the body 1 line; of the wings 2 lines.

*a.* Columbia. From Mr. Turner's collection.

Genus 28. *CYPHOTES*.

*Cyphotes*, *Burm. Handb. Ent.* ii. 1, 143, 17.

1. *CYPHOTES NODOSA*.

*Cyphotes nodosa*, *Burm. Handb. Ent.* ii. 1, 143, 1. *Silb. Rev. Ent.* iv. 181, 1.

*Para.*

Genus 29. *OPHIDERMA*.

*Ophiderma*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 493.

1. *OPHIDERMA SALAMANDRA*.

*Ophiderma salamandra*, *Lefebvre, MSS. Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 493, 1.

New York.

Genus 30. *SCAPHULA*.

*Scaphula*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 494, pl. 7. f. 18, 20.

*Membracis?* *Fabr.*

*Centrotus?* *Fabr.*

## 1. SCAPHULA SEMIATRA.

Scaphula semiatra, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 494, 1, pl. 7, f. 18.

Coromandel.

## 2. SCAPHULA FLAVICANS.

Scaphula flavicans, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 494, 2.

Cayenne.

## 3. SCAPHULA? MINUTA.

Membracis minuta, *Fab. Ent. Syst. Suppl.* 515, 32.

Centrotus minutus, *Fabr. Syst. Rhyn.* 22, 31.

East Indies?

## 4. SCAPHULA CENTROMACULATA.

Scaphula centromaculata, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 495, 3.

Cayenne.

## 5. SCAPHULA ALUTACEA.

Scaphula alutacea, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 495, 4.

Cayenne.

## Genus 31. DARNOIDES.

Smilia, *Germ.*

Darnoides, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 495, pl. 7, f. 15.

## 1. DARNOIDES LIMBATA.

Darnoides limbata, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 495, 1, pl. 7, f. 16.

Columbia.



## 2. DARNOIDES BRUNNEA.

*Darnoides brunnea*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 496, 2.

*Smilia brunnea*, *Germ. Silb. Rev. Ent.* iii. 308.

Brazil.

## 3. DARNOIDES CARINATA, Fem.

*Nigra, multicarinata, flavo guttata; prothorax apice flavo fasciatus; abdomen apice ferrugineum; pedes ferruginei; femora posteriora tibique postice picea; alae antice nigrificantes, apice limpidæ.*

Black, shining: head and fore-chest roughly punctured: head about half the breadth of the fore-chest, rounded on each side, slightly convex along the hind border, angular in front, slightly tuberculate about the eyelets: eyes prominent: fore-chest with a rim in front and on each side before the shoulders, which are angular and prominent; three ridges on the back in front of the shoulders, the middle one yellow towards the fore border, the side pair much contorted; seven ridges on the back behind the shoulders, partly dotted with yellow; the two outer pair very short, the inner pair undulating, extending beyond half the length of the hind appendage; the latter keeled, extending a little beyond the tip of the abdomen, compressed towards the base, attenuated and with a yellow band towards the tip, which is very acute: abdomen ferruginous at the tip: legs ferruginous; hinder thighs and hind shanks pitchy: forewings blackish, punctured at the base, colourless towards the tips; veins black, yellow towards the tips. Length of the body  $2\frac{1}{2}$  lines: of the wings 6 lines.

a. Brazil. Presented by John Miers, Esq.

## Genus 32. ACUTALIS.

*Smilia*, *Germ.*

*Acutalis*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 496, pl. 7, f. 18, 19.

## 1. ACUTALIS BALTEATA.

*Acutalis balteata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 496, 1. Columbia.

## 2. ACUTALIS FLAVOZONATA.

*Acutalis flavozonata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 497, 2.

Brazil.

## 3. ACUTALIS BINARIA.

*Acutalis binaria*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 497, 3.  
Columbia.

## 4. ACUTALIS TRIPUNCTATA.

*Acutalis tripunctata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 497, 4.

*Entylia triguttata*? *Burm. Silb. Rev. Ent.* iv. 183, 4.

Brazil.

## 5. ACUTALIS FLAVIPENNIS.

*Acutalis flavipennis*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 497, 5.

*Smilia flavipennis*, *Germ. Silb. Rev. Ent.* iii. 240, 16.

Pennsylvania.

## 6. ACUTALIS? MELANOGRAMMA.

*Membracis melanogramma*, *Perty, Del. An. Art.* 178, pl. 35, f. 10.

Brazil.

## 7. ACUTALIS? ———.

*Acutalis*, *Stoll, Cic.* 71, pl. 18, f. 97.

Surinam.

## 8. ACUTALIS FUSCONERVOSA.

*Acutalis fusconervosa*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 498, 6.

Columbia.

## 9. ACUTALIS ANTICO-NIGRA.

*Acutalis antico-nigra*, *Lefebvre, MSS. Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 498, 7.

North America.

## 10. ACUTALIS BIGUTTULA.

*Acutalis biguttula*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 498, 8.

Brazil.

## 11. ACUTALIS LITTERATA.

*Acutalis litterata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 498, 9.  
Columbia.

## Genus 33. HETERONOTUS.

*Membracis*, *Fabr.*

*Centrotus*, *Fabr.*

*Heteronotus*, *Delaporte, Amyot et Serv. Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 499, pl. 3, f. 6.

*Combophora*, *Burm.*

*Ranatra*, *Lesson.*

Group 1. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 499.

## 1. HETERONOTUS QUADRINODOSUS.

*Heteronotus quadrinodosus*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 499, 1, pl. 5, f. 27.

a. Mexico. From Mr. Shuckard's collection.

## 2. HETERONOTUS FLAVOLINEATUS.

*Heteronotus flavolineatus*, *Delap. Ann. Soc. Ent. Fr. i. 96*, 3, pl. 3, f. 9. *Amyot et Serv. Hist. Nat. Hén.* 549, pl. 9, f. 6.  
*Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 499, 2.

*Hinermis*, *Delap. Ann. Soc. Ent. Fr. i. 97*, 4, pl. 3, f. 9, 10.

*Centrotus furcatus*, *G. R. Gray, Griff. Ann. Kingd. Ins.* 2, 261, pl. 108, f. 1.

*Combophora signata*, *Burm. Silb. Rev. Ent.* i. 228, 3.

*Heteronotus signatus*, *Burm. Handb. Ent.* ii. 1, 130, 1.

*a, b.* Brazil. Presented by John Miers, Esq.

### 3. *HETERONOTUS VULNERANS.*

*Heteronotus vulnerans*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 500, 3, pl. 7, f. 25.

*Combophora vulnerans*, *Burm. Silb. Rev. Ent.* i. 228, 2.

*a.* Brazil. Presented by John Miers, Esq.

*b.* Brazil. From M. Parzudaki's collection.

*c.* Brazil. From Mr. Shuckard's collection.

### 4. *HETERONOTUS NIGRICANS.*

*Heteronotus nigricans*, *Delap. Ann. Soc. Ent. Fr.* i. 96, 2, pl. 3, f.

8. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 500, 4.

*a, b.* Brazil. Presented by John Miers, Esq.

### 5. *HETERONOTUS EXCISUS*, Mas.

*Niger*; *caput flavo varium*; *prothorax flavo quadricittatus, postice nodosus spinisque ferrugineis armatus*; *abdomen piceum, basi fulvum*; *pedes ferruginei*; *tarsi fulvi*; *alæ luride*; *alæ anticae fusco marginatae.*

Body black, shining; head yellow on each side and in front with the exception of a narrow interval on each side of the face; a yellow stripe between the hind border and the face: fore-chest armed with a long slender diverging spine on each side, adorned with four yellow stripes; the inner pair interrupted; the outer pair turned inward and forming right angles at their tips: behind them the fore-chest is binodose, and full twice the length of the abdomen; the first knob is of moderate size, and is separated by a cylindrical contraction from the second, which is much larger and is armed beneath with a stout, curved, ferruginous spine; the latter has a yellow band near its black tip; the knob has also beneath its hinder part two short ferruginous spines with yellow bands adjoining their black tips: abdomen pitchy, tawny towards the base: legs ferruginous; tarsi tawny, with pitchy tips: wings lurid; fore-wings mostly bordered with brown; veins pitchy, yellow towards the tips. Length of the body 5 lines; of the wings 9 lines.

*a.* Pará. From Mr. Stevens' collection.

6. *HETERONOTUS GLANDULIGER*.

*Ranatra glanduligera*, *Less. Ill. Zool.* pl. 57, f. 2.

Brazil.

7. *HETERONOTUS BICORNIS*.

*Ranatra bicornis*, *Less. Ill. Zool.*

Brazil.

Group 2. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 500.

8. *HETERONOTUS ABBREVIATUS*.

*Heteronotus abbreviatus*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 500, 5, pl. 7, f. 26.

a. Brazil.

9. *HETERONOTUS NODOSUS*.

*Heteronotus nodosus*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 501, 6.

*Membracis nodosa*, *Germ. Mag. Ent.* iv. 30, 41, pl. 1, f. 2.

*Combophora nodosa*, *Burm. Silb. Rev. Ent.* i. 229, 6.

a, b. Brazil. From Mr. Mornay's collection.

c. Brazil. From Mr. Shuckard's collection.

10. *HETERONOTUS TRIDENS*.

*Heteronotus tridens*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 501, 7.

*Combophora tridens*, *Burm. Silb. Rev. Ent.* i. 229, 5.

a. Parà. From Mr. Stevens' collection.

11. *HETERONOTUS ARMATUS*.

*Heteronotus armatus*, *Delap. Ann. Soc. Ent. Fr.* i. 97, 5. *Fairm.*

*Ann. Soc. Ent. Fr. 2me Série*, 501, 8.

*Var. ?* *H. spinosus*, *Delap. Ann. Soc. Ent. Fr.* 1.

a. Parà. From Mr. Stevens' collection.

## 12. HETERONOTUS FUSCUS.

*Heteronotus fuscus*, *Delap. Ann. Soc. Ent. Fr.* i. 98, 6.  
Brazil.

## 13. HETERONOTUS RETICULATUS.

*Combophora reticulata*, *Burm. Silb. Rev. Ent.* i. 227, 1.

## 14. HETERONOTUS BULBIFER.

*Combophora bulbifera*, *Burm. Silb. Rev. Ent.* i. 229, 4.

## 15. HETERONOTUS HORRIDUS.

*Membracis horridus*, *Fabr. Ent. Syst.* iv. 21, 18.

*Centrotus horridus*, *Fabr. Syst. Rhyn.* 16, 4.

Cayenne.

## 16. HETERONOTUS ABCISUS, Fem.

*Fulvus*; *caput nigro bivittatum*; *prothorax anticè nigro quadri-*  
*vittatus, utrinque flavo bivittatus, disco ferrugineus, posticè*  
*binodosus ferrugineo varius*; *pedes fulvi*; *alæ luridæ.*

Tawny: head almost triangular, much depressed, with two black stripes: four irregular interrupted connected black stripes on the fore part of the fore-chest which has a ferruginous disk and a yellow stripe on each side; it is armed with two very long slender black curved obliquely diverging horns; the hind part of the fore-chest is binodose and much longer than the abdomen; the knobs have ferruginous disks and black interrupted bands; the first knob is of moderate size and separated by a short contraction from the second, which is larger and is armed behind with three very long slender slightly curved ferruginous spines which are yellow towards their black tips; the upper pair diverge almost directly from each other, but are slightly inclined backward; the lower one is much longer and is curved upward: legs tawny; hind-shanks beset with rows of very small black spines: wings lurid; veins ferruginous, black along the fore border. Length of the body 5 lines; of the wings 12 lines.

*a, b.* Brazil. From Dr. Leach's collection.

*c—e.* Parà. From Mr. Stevens' collection.

## Genus 34. CYPHONIA.

*Membracis*, *Fabr.*

*Centrotus*, *Fabr.*

*Heteronota*, *Germ.*

*Cyphonia*, *Delap.*, *Amyot et Serv.*, *Fairm. Ann. Soc. Ent. Fr.* 2me  
Série, iv. 501, pl. 3, f. 5.

*Combophora*, *Burm.*, *Guérin.*

Group 1. *Fairm. Ann. Soc. Ent. Fr.* 2me Série, iv. 502.

## 1. CYPHONIA TRIFIDA.

*Cyphonia trifida*, *Amyot et Serv. Hist. Nat. Hémi.* 548, 1, pl. 7, f. 8.  
*Fairm. Ann. Soc. Ent. Fr.* 2me Série, iv. 502, 1.

*Combophora trifida*, *Burm. Silb. Rev. Ent.* i. 232, 13.

*Membracis trifida*, *Fabr. Ent. Syst.* iv. 12, 19. *Oliv. Enc. Méth.*  
vii. 667, 29.

*Centrotus trifidus*, *Fabr. Syst. Rhyn.* 16, 2.

*Cyphonia ornata*, *Delap. Ann. Soc. Ent. Fr.* i. 230, pl. 6, f. 4.

a. Brazil. Presented by John Miers, Esq.

b—e. Brazil. From Mr. Shuckard's collection.

## 2. CYPHONIA PROXIMA.

*Cyphonia proxima*, *Fairm. Ann. Soc. Ent. Fr.* 2me Série, iv. 502, 2.

*Combophora proxima*, *Guér. Icon. Règ. Anim.*

Mexico.

Group 2. *Fairm. Ann. Soc. Ent. Fr.* 2me Série, iv. 502.

## 3. CYPHONIA CAPRA ?

*Combophora capra* ? *Burm. Silb. Rev. Ent.* i. 231, 22.

*Cyphonia capra* ? *Fairm. Ann. Soc. Ent. Fr.* 2me Série, iv. 502, 3,  
pl. 7, f. 22.

a. Brazil. Presented by John Miers, Esq. c.

## 4. CYPHONIA FLAVA.

*Combophora flava*, *Burm. Silb. Rev. Ent.* i. 231, 11.  
Brazil.

## 5. CYPHONIA FURCATA?

*Combophora furcata?* *Burm. Silb. Rev. Ent.* i. 231, 10.

Mas. *Nigra, ferrugineo tuberculata; prothorax spinis quatuor flavis armatus, posticè nodosus et trifurcatus; abdomen flavum, subtus apice picrum; pedes flavi; femora nigra; alæ limpide.*

Black, shining, covered with ferruginous pimples which are beset with white bristles: back of the fore-chest armed with four long yellow spines which are black and very stout at the base; hinder appendage as long as the abdomen, nodose, trifurcate; the three forks spring from the knobs and are yellow towards the tips; the middle one is slender and longer than the other two which have large knobs: abdomen yellow, pitchy at the tip beneath: legs yellow; thighs black: wings colourless; veins yellow; two pitchy dots on the veins of the fore-wings; three discoidal areolets, one pentagonal, one long and petiolated, and one oval. Length of the body (including the spines) 2 lines; of the wings 4 lines.

*a.* Brazil. Presented by John Miers, Esq.

*b, c.* Brazil. From Mr. Shuckard's collection.

## 6. CYPHONIA RECTISPINA.

*Cyphonia rectispina*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 502, 6.

Mexico.

## 7. CYPHONIA HIRTA.

*Cyphonia hirta*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 503, 7, pl. 7, f. 23.

*Heteronota hirta*, *Germ. Silb. Rev. Ent.* iii. 255, 2.

*a.* Brazil. Presented by John Miers, Esq.



## 8. CYPHONIA BRACCATA.

- Cyphonia braccata*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 503, 8, pl. 7, f. 24.  
*Heteronota braccata*, *Germ. Silb. Rev. Ent.* iii. 254, 1.  
 Brazil.

## 9. CYPHONIA CLAVIGERA.

- Cyphonia clavigera*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 503, 9.  
*Centrotus claviger*, *Fabr. Syst. Rhyn.* 17, 5.  
*Combophora clavigera*, *Burm. Silb. Rev. Ent.* i. 230, 9.  
*a.* Brazil. Presented by John Miers, Esq.  
*b.* Brazil. From M. Parzudaki's collection.

## 10. CYPHONIA CLAVATA.

- Cyphonia clavata*, *Amyot et Serr. Hist. Nat. Hém.* 548. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 503, 10.  
*Combophora clavata*, *Burm. Silb. Rev. Ent.* i. 230, 8. *Handb. Ent.* ii. 1, 129, 1.  
*Membracis clavatus*, *Fabr. Ent. Syst.* iv. 13, 20. *Oliv. Enc. Méth.* vii. 667, 30.  
*Centrotus clavatus*, *Fabr. Syst. Rhyn.* 17, 4. *Coq. Ill.* ii. pl. 18, f. 5. *Stoll, Cic.* pl. 21, f. 115.  
*Membracis bulbifera*, *Germ. Mag. Ent.* iv. 30, 40.  
 Brazil.

## Genus 35. COMBOPHORA.

- Combophora*, *Germ., Amyot et Serv., Guér., Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 504.  
*Heteronotus*, *Burm.*  
*Membracis*, *Perty.*

## 1. COMBOPHORA BESKII.

- Combophora Beskii*, *Germ. Silb. Rev. Ent.* i. 232, 14, pl. 12.  
*Amyot et Serv. Hist. Nat. Hém.* 147. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 504, 1, pl. 3, f. 7.

*Membracis cucullata*, *Perty, Del. An. Art.* 178, pl. 35, f. 9.  
*Var.?* *M. inanis*, *Fabr. Syst. Rhyn.* 6, 2.

*a.* Brazil. Presented by John Miers, Esq.

*b, c.* Brazil. From Mr. Mornay's collection.

## 2. COMBOPHORA LAPORTI.

*Combophora Laporti*, *Germ. Silb. Rev. Ent.* iii. 253, 2.

Brazil.

## 3. COMBOPHORA CONSENTANEA.

*Combophora consentanea*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 505, 3.

*a.* Brazil. From Mr. Stevens' collection.

## 4. COMBOPHORA MACULATA.

*Combophora maculata*, *Guér. Icon. Règ. An. Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 505, 4.

Bolivia.

## 5. COMBOPHORA MINOR.

*Combophora minor*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 505, 5.

Brazil.

## 6. COMBOPHORA CARINATA.

*Combophora carinata*, *Guér. Icon. Règ. An. Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 505, 6.

Brazil.

## Genus 36. CEDA.

*Membracis*, *Fabr., Oliv., Perty, Blanchard.*

*Smilia*, *Germar, Burm., Westw.*

*Ceda*, *Amyot et Serv., Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 505, 31.

1. *ŒDA INFLATA*.

*Œda inflata*, *Amyot et Serv. Hist. Nat. Hém.* 546. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 506, 1, pl. 3, f. 1.

*Smilia inflata*, *Germ. Silb. Rev. Ent.* iii. 240. *Burm. Handb. Ent.* ii. 1, 137, 1.

*Membracis inflata*, *Fabr. Ent. Syst.* iv. 8, 1. *Syst. Rhyn.* 6, 2, 1. *Oliv. Enc. Méth.* vii. 662, 1. *Perty, Del. An. Art.* 178, pl. 35, f. 8. *Blanch. Hém.* iii. 180, 10.

a. Brazil. Presented by John Miers, Esq.

b. Brazil. From Mr. Mornay's collection.

2. *ŒDA INERMIS*.

*Œda inermis*, *Spinola, MSS.* *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 506, 2.

*Membracis inflata*, *Perty, Del. An. Art.* 178, pl. 35, f. 8.

Brazil.

3. *ŒDA INFORMIS*.

*Œda informis*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 507, 3, pl. 6, f. 28.

*Smilia informis*, *Westw. Ann. Nat. Hist. April*, 1842, 119.

a. Brazil. From Mr. Mornay's collection.

Genus 37. *BOCYDIUM*.

*Boeydium*, *Latr., Germ., Burm., Amyot et Serv., Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 507, pl. 3, f. 4.

*Centrotus*, *Fabr.*

*Sphæronotus*, *Delaporte.*

*Cicada*, *Pallas.*

1. *BOCYDIUM GLOBULARE*.

*Boeydium globulare*, *Germ. Silb. Rev. Ent.* iii. 260, 1. *Burm. Handb. Ent.* ii. 1, 129, 1. *Amyot et Serv. Hist. Nat. Hém.* 553, 2. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 508, 1.

*Centrotus globularis*, *Fabr. Syst. Rhyn.* 16, 3. *Stoll, Cic.* 110, pl. 28, f. 163. *Germ. Mag.* iv. 32, 3. *G. R. Gray, Griff. An. Kingd. Ins.* ii. 161, pl. 108, f. 2. *Westw. Duncan's Nat. Libr.* i. 286, pl. 25, f. 1.

*Sphæronotus globularis*, *Delap. Ann. Soc. Ent. Fr.* i. 139.

*a, b.* Brazil. Presented by John Miers, Esq.

*c.* Brazil. Presented by M. Serville.

*d.* Brazil. From Mr. Shuckard's collection.

*e.* Brazil. From Mr. Stevens' collection.

*f.* Brazil.

## 2. BOCYDIUM GLOBULIFERUM.

*Cicada globulifera*, *Pallas, Spicil. Zool. fasc.* 9, 22, pl. 1, f. 12.

## 3. BOCYDIUM GLOMERIFERUM.

*Bocyidium glomeriferum*, *Germ. Silb. Rev. Ent.* iii. 260, 2. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 508, 2.

*B. tintinnabuliferum*? *Less. Ill. Zool.* pl. 55, f. 1.

*a, b.* Brazil. Presented by John Miers, Esq.

## 4. BOCYDIUM RUFIGLOBUM.

*Bocyidium rufiglobum*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 508, 3.

Brazil.

## 5. BOCYDIUM GERMARI.

*Bocyidium Germari*, *Guér. Icon. Règ. An. Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 508, 4.

*a—c.* Brazil. Presented by John Miers, Esq.

## 6. BOCYDIUM ANCORA.

*Bocyidium ancora*, *Perty, Del. An. Art.* 179, pl. 35, f. 15. *Amyot et Serv. Hist. Nat. Hém.* 552, 1. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 509, 5.

*B. trispinosum*, *Guér. Icon. Règ. An.*

*a—c.* Cayenn. Presented by M. Serville.

## Genus 38. CENTROTUS.

Cicada, *Linn., Deg., Fabr., Gmel.*  
 Membracis, *Fabr., Oliv., Hardwick, Petagna.*  
 Centrotus, *Fabr., &c.*  
 Ranatra, *Petiver.*

Group 1.—Sub-group 1. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 510.

## 1. CENTROTUS DAMA.

*Centrotus dama*, *Germ. Silb. Rev. Ent.* iii. 258, 7, pl. 111, f. 14.  
*Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 510, 1, pl. 3, f. 14.  
 East Indies.

## 2. CENTROTUS GAZELLA.

*Centrotus gazella*, *Hoffman, MSS. Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 510, 2.  
 East Indies.

## 3. CENTROTUS SCUTELLARIS.

*Centrotus scutellaris*, *Fabr. Syst. Rhyn.* 20, 19. *Germ. Silb. Rev. Ent.* iii. 257, 5. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 510, 3.  
*Membracis scutellaris*, *Oliv. Enc. Méth.* vii. 665, 23.  
 East Indies.

## 4. CENTROTUS TAURUS.

*Centrotus taurus*, *Fabr. Syst. Rhyn.* 20, 19. *Germ. Silb. Rev. Ent.* iii. 257, 5. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 510, 4.  
*Cicada taurus*, *Lör. Sp. Ins.* ii. 317, 10. *Mant. Ins.* ii. 264, 20. *Gmel. Ed. Syst. Nat.* i. 3, 2095, 68.  
*Membracis Taurus*, *Fabr. Ent. Syst.* iv. 14, 24. *Oliv. Enc. Méth.* vii. 665, 23.  
*M. tricornis*? *Hardw. Zool. Journ.*, 1838, 13, 114, pl. Suppl. 30, c, d, f.  
 a. ——— ?

## 5. CENTROTUS NODICORNIS.

*Centrotus nodicornis*, *Germ. Silb. Rev. Ent.* iii. 257, 6. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 511, 5, pl. 3, f. 13.

*a, b.* Cape. From M. Drège's collection.

## 6. CENTROTUS SENEGALENSIS?

*Centrotus senegalensis?* *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 511, 6.

*a.* South Africa. Presented by Dr. A. Smith.

## 7. CENTROTUS PUBIPENNIS.

*Centrotus pubipennis*, *Spinola, MSS. Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 511, 7.

*a.* Cape. From M. Drège's collection.

## 8. CENTROTUS ACULEOLUS.

*Centrotus aculeolus*, *Lefebvre, MSS. Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 512, 8.

Surinam.

## 9. CENTROTUS BRUNNIPENNIS.

*Centrotus brunnipennis*, *Germ. Silb. Rev. Ent.* iii. 257, 4. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 512, 9.

Cape.

## 10. CENTROTUS HAMIFER.

*Centrotus hamifer*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 512, 10.

Mexico.

## 11. CENTROTUS PUSILLUS.

*Centrotus pusillus*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 512, 11.

Mexico.

## 12. CENTROTUS MAGELLANI.

*Centrotus Magellani*, Lefebvre, MSS. *Faun. Ann. Soc. Ent. Fr.*  
2me Série, iv. 513, 12.

Manilla.

## 13. CENTROTUS TERMINALIS, Mas et Fem.

*Niger*; *abdomen supra canum*; *tibiæ piceæ*; *tarsi postici fulvi*;  
*alæ anticæ subluridæ*, *ad costæ apicem fusco vittatæ*; *alæ*  
*posticæ limpidae*.

Black, clothed with tawny hairs: head and fore-chest roughly punctured: head convex, very short, transversely subfusiform, a little narrower than the fore-chest, undulating along the hind border, retuse in front on each side of the face, whose hind border is semi-circular and occupies much less than half the length of the face; epistoma prominent, retuse: fore-chest thick in front, rising vertically above the head, indistinctly ridged; shoulders very obtusely angular, not prominent; above them are two long stout prismatic diverging acute horns, which are curved backward, especially towards their tips; their sides are slightly concave, their inner side and their outer side are of equal breadth, their hinder side is narrower; behind them the fore-chest is armed with a long, slender, smooth, acute, triangular horn, which is slightly curved downward, and extends to the tip of the abdomen: abdomen adorned above with hoary reflections: lamellæ along the ovipositor thickly punctured: tibiæ pitchy; hind tarsi tawny: wings very pale lurid; a narrow pale brown streak on the fore border near the tip of each fore-wing; two discoidal areolets; veins tawny: hind-wings colourless; veins black. Length of the body 3—3½ lines; of the wings 6—7 lines.

*a-g.* China. Presented by G. T. Lay, Esq.

*h.* (Larva? Testaceous, unarmed, very pubescent). Hong Kong.  
Presented by J. C. Bowring, Esq.

## 14. CENTROTUS REPONENS, Mas et Fem.

*Niger*, *hirtus*; *abdomen supra canum*; *alæ anticæ subluridæ*, *ad*  
*costæ apicem fusco vittatæ*; *alæ posticæ limpidae*.

Has the structure of *C. terminalis*, to which it is very nearly allied: body more hairy: horns in front of the fore-chest narrower,

less curved backward at the tips: legs generally quite black. Length of the body 3—4 lines; of the wings 6—8 lines.

*a, b.* Tenasserim. Presented by — Packman, Esq.

*c.* North Bengal. From Miss Campbell's collection.

*d.* Philippine Islands. From Mr. Cuming's collection.

*e, f.* Philippine Islands. From Mr. Wood's collection.

# 15. CENTROTUS VICARIUS, Fem.

*Niger; abdomen supra canum; tarsi posteriores picei; alæ limpide; alæ antice ad costæ apicem fusco vittate.*

Has the structure of the two preceding species, but the horns of the fore-chest are shorter; they are also more curved at the tips than those of *C. reponens*: wings colourless; a brown stripe along the tips of the fore borders: legs black; posterior tarsi pitchy. Length of the body  $3\frac{1}{2}$  lines; of the wings 7 lines.

*a—c.* Java. From Mr. Melly's collection.

*d.* ———? Presented by J. G. Children, Esq.

*e, f.* ———?

# 16. CENTROTUS SUBSTITUTUS, Fem.

*Niger; pectus flavo-pubescent; abdomen supra canum; tarsi picei; tarsi postici fulvi; alæ nigre.*

Like the three preceding species in structure: horns of the fore-chest like those of *C. vicarius*: breast with a thick patch of pale yellow down on each side in front: legs black; tarsi pitchy; hind tarsi tawny: wings black; tips colourless; veins tawny. Length of the body 3 lines; of the wings 6 lines.

*a.* North Bengal. From Miss Campbell's collection.

# 17. CENTROTUS HORRIDULUS, Fem.

*Niger, tuberculatus; tarsi ferruginei; alæ fusce.*

Body black, dull, clothed with tawny down, tuberculate: head triangular, hardly broader than long, much narrower than the fore-chest; hind border of the face obconical, occupying half the length of the head: fore-chest thick, vertical above the head; shoulders rounded, not prominent; horns above them diverging or ascending



obliquely, prismatic, broad, much compressed, curved backwards; inner side as broad as the outer side and about twice the breadth of the hind side; on the inner edge of the hind side near the tip of the triangle there is a short branch or tooth; hinder horn of the fore-chest much compressed, highly arched, descending nearly to the tip of the abdomen, which it equals in length, slightly widening where it approaches the abdomen, and thence more horizontal and tapering to the tip: tarsi ferruginous: wings brown; veins pitchy. Length of the body  $3\frac{1}{2}$  lines; of the wings 7 lines.

a. Port Natal. From M. Gueinzus' collection.

#### 18. CENTROTUS PILOSUS, Mas.

*Ferrugineus, albido-pubescent; prothorax nigro varius, apicem versus fulvus; pectus et abdomen picea; pedes fulvi; alæ anticae sublimpidæ, margine postico fusco maculatæ.*

Ferruginous, most thickly clothed with dingy white down: head and fore-chest punctured: head short, transversely subfusiform, a little narrower than the fore-chest, brassy in front; its breadth nearly twice its length; face small: fore-chest deep in front, partly black, rising almost vertically from the head, slightly ridged; shoulders obtusely angular, somewhat prominent; horns above rather long, broad, irregularly prismatic, slightly diverging and inclined forward; their tips more diverging, almost trifurcate, slightly widened; inner side and outer side much broader than the hind side; angles slightly serrated; of the three forks or angles at the tip the fore one is slightly obtuse, the middle one acute, and the hind one rectangular; hind horn stout and vertical for a short space from the base, then forming a right angle and extending backward much beyond the tip of the abdomen; hind part tawny, slender, tapering, very slightly undulating, with a black acute tip: breast and abdomen pitchy; legs tawny; wings almost colourless; a brown spot on the hind angle of each fore-wing; veins tawny, here and there brown. Length of the body 2 lines; of the wings  $4\frac{1}{2}$  lines.

a. North India. From Mr. Warwick's collection.

#### 19. CENTROTUS BIPENNIS.

*Ferrugineus; prothorax flavo bifasciatus; pedes flavi; alæ anticae fuscae margine postico piceo maculatæ; alæ posticae limpidæ.*

Ferruginous: head very short, transversely subfusiform, finely punctured, a little narrower than the fore-chest; hind border slightly

retuse in the middle, slightly concave on each side; face broad, with two indistinct parallel ridges; hind part broad, less than half the length of the head: fore-chest punctured, very deep in front, rising vertically from the head, very slightly ridged; shoulders angular, hardly prominent, with a very broad yellow band between them: horns above long, acute, prismatic, roughly punctured, united at the base, yellow beneath, bordered with yellow above, vertical for a short space, then curved and diverging outward; sides lanceolate; upper side rather broader than either of the lower sides which are slightly concave; the angle between the two latter is prolonged on each side into a ridge which extends to the hind border of the fore-chest; hind horn stout, roughly punctured, almost vertical but slightly inclined backward for a short space from the base, then forming a conical protuberance in front and extending nearly at a right angle backwards beyond the tip of the abdomen; hind part slender, tapering, triangular, very undulating, yellow along the middle third of its length, black towards the tip which is very acute: scutellum long, oblanccolate: legs yellow; hinder shanks beset with very minute black spines: fore-wings dark brown, rather paler towards their tips, with a pitchy spot on each hind angle; stigma and veins pitchy; two discoidal areolets: hind-wings colourless; veins tawny. Length of the body  $2\frac{1}{2}$  lines; of the wings 6 lines.

a. W. Africa. Presented by B. Frend, Esq.

## 20. CENTROTUS LATIPENNIS, Fem.

*Ferrugineus; caput et prothorax piceo varia; prothorax anticè flavo vittatus, posticè flavo fasciatus; alæ anticae luridae.*

Connects *Centrotus* with *Oxyrachis*, allied also to *Lycoderes*. Ferruginous: head and fore-chest punctured, partly pitchy: head triangular, notched on each side in front, very little narrower than the fore-chest; face conical, not half the length of the head: fore-chest very deep and with a slender yellow middle stripe in front, rising vertically from the head, hardly ridged; shoulders angular, not prominent; horns above of moderate length, acute, prismatic, roughly punctured, slightly curved outward, diverging from a common vertical base; sides lanceolate; upper side a little broader than the lower sides; hind horn deep, narrow, triangular, ridged above, proceeding from between the union of the fore horns, convex or curved downward for a space from its base, thence horizontal to its tip which does not extend to the tip of the abdomen; a broad yellow band near its base: shanks slightly widened: fore-wings lurid, broad, punctured for one-third of the length from the base; tips

rather broad; veins ferruginous; two discoidal areolet: hind-wings paler. Length of the body 2 lines; of the wings  $4\frac{1}{2}$  lines.

*a, b.* Brazil. Presented by John Miers, Esq.

## 21. CENTROTUS ALTIFRONS, Fem.

*Niger; scutellum piceum; abdomen supra cinereum; pedes picei; femora nigra; alæ antice subluridæ; alæ posticæ limpide.*

Body black, thickly clothed with tawny hairs; head transverse, flat, thickly punctured, a little narrower than the fore-chest between the shoulders, slightly undulating along the hind border, very slightly retuse in front; hind part of the face angular, about half the length of the head behind it: fore-chest roughly punctured, very deep in front, rising vertically from the head; shoulders angular, not prominent; horns above small, prismatic, horizontal, diverging, curved backward, very slender towards their tips which are very acute; their length rather less than half the breadth of the chest between them; hind appendage very slender, extending to the tip of the abdomen, slightly curved downward, tapering from the base to the tip which is very acute; its lower side raised high above the scutellum which is pitchy, and has a semicircular concave tip with a spine on each side: abdomen gray above: legs pitchy; thighs black: fore-wings pale lurid, lanceolate: veins ferruginous, clothed with tawny hairs; two discoidal areolet: hind-wings colourless. Length of the body  $3\frac{1}{2}$  lines; of the wings 7 lines.

*a.* Congo. Presented by Sir J. Richardson.

## 22. CENTROTUS TAURIFRONS, Mas.

*Niger; alæ antice subluridæ; alæ posticæ limpide.*

Black: head transverse, very short, hardly narrower than the fore-chest between the shoulders, thickly punctured, convex along the hind border, notched and slightly retuse on each side in front; its breadth full twice its length with the exception of the face which is conical, very prominent, and has a lobe on each side: fore-chest very deep in front, roughly punctured, very slightly ridged, rising vertically from the head; shoulders rounded, not prominent; horns above long, prismatic, very broad, diverging, curved backward, almost horizontal; hind side not more than half the breadth of either of the other sides; length of the horns much more than twice the breadth of the chest between them; hind appendage slender, extending beyond the tip of the abdomen, hardly curved downward, taper-

ing from the base to the tip which is very acute; its lower side raised high above the scutellum: fore-wings pale lurid, lanceolate; veins ferruginous; two discoidal areolets: hind-wings colourless. Length of the body 3 lines; of the wings 7 lines.

a. Java. From the East India Company's collection.

Sub-group 2. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 513.

### 23. CENTROTUS PARIA.

*Centrotus paria*, *Lefebvre, MSS. Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 513, 13.

a. North Bengal. From Miss Campbell's collection.

### 24. CENTROTUS TASMANIÆ? Fem.

*Centrotus Tasmaniæ?* *Fairm. Ann. Soc. Ent. Fr. 2me Série*, 513, 14, pl. 3, f. 15.

*Ferrugineus, angustus; cornu posticum rufo bivittatum; pectus flavo-pubescent; tibiæ sat latæ; alæ anticiæ fuscæ, longæ; alæ posticiæ limpidæ.*

Ferruginous, clothed with tawny hairs: body rather long and narrow: head transverse, slightly impressed, finely punctured, narrower than the fore-chest between the shoulders, convex and slightly retuse on each side in front; hind part of face angular, occupying a little less than half the length of the head: fore-chest not high, roughly punctured, very slightly ridged; shoulders obtusely angular, slightly prominent; horns above very thick, prismatic at the base, ascending, slightly diverging, twisted, quadrilateral towards the tips which are truncated; fore side and hind side widening towards the tips, the former with two ridges, the latter concave; outer side and inner side conical; length of the horns more than four times the breadth of the fore-chest between them; hind appendage extending far beyond the tip of the abdomen, slightly curved, tapering from the base to the tip, red on each side along the lower border; sides of the scutellum and of the breast clothed with yellow down: shanks rather broad: fore-wings brown, long, lanceolate; veins ferruginous; three discoidal areolets: hind-wings colourless. Length of the body 4 lines; of the wings 9 lines.

a, b. Van Dieman's Land. From Dr. Hooker's collection.

c. Van Dieman's Land. From Mr. Shuckard's collection.

d. ———?

25. *CENTROTUS FUSCIPENNIS*.

*Centrotus fuscipennis*, *Germ. Silb. Rev. Ent.* iii. 256, 3. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 514, 15.

a. Cape. From M. Drège's collection.

26. *CENTROTUS CAPENSIS*.

*Centrotus capensis*, *Germ. Silb. Rev. Ent.* ii. 256, 2. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 514, 16.

Cape.

27. *CENTROTUS CORNUTUS*.

*Cicada cornuta*, *Linn. Syst. Nat.* ii. 705, 6. *Faun. Suec.* 879. *Geoff. Ins.* i. 423, 18, pl. 9, f. 2. *Schreb. Ins.* ii, f. 3, 4. *Sulz. Ins.* pl. 10, f. 63. *Schæff. Icon.* pl. 96, f. 2. *Scop. Ent. Carn.* 435. *Geoff. Ins.* ii. 423, 18. *Fabr. Sp. Ins.* ii. 317, 9. *Mant. Ins.* ii. 264, 19. *Gmel. Ed. Syst. Nat.* i. 3, 2094, 6.

*C. fusca*, *Deg. Ins.* iii. 181, 3, pl. 11, f. 22.

*Ranatra cornuta*, *Petiv. Gaz.* pl. 47, f. 2, 3.

*Centrotus cornutus*, *Fabr. Ent. Syst.* iv. 14, 22. *Syst. Rhyn.* 19, 15. *Panz. Faun. Germ.* 4, 19. *Don. Brit. Ins.* iii. pl. 83. *Oliv. Enc. Méth.* vii. 665, 22. *Tign.* 120, pl. 5, f. 3. *Germ. Mag. Ent.* iv. 32, 1. *Curt. Brit. Ent.* 313, 1. *Duf. Rech.* 97. *Burm. Handb. Ent.* ii. 1, 132, 1. *Ramb. Faun. Andal.* 206. *Blanch. Hém.* 112, pl. 13, f. 8. *Amyot et Serv. Hist. Nat. Hém.* 551, 1. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 514, 17. *Costa, Faun. Règn. Nap. Ins. Emitt. Centrotus*, 1, 1. *Crochard, Ed. Règn. An. Ins.* pl. 98, f. 5.

*Membracis cornuta*, *Petagna, Inst. Entom.* ii. 617, pl. 9, f. 2.

*Centrotus*, *Amyot, Ann. Soc. Ent. Fr. 2me Série*, v. 182, 413.

a—c. England.

d—i. France.

j. Spain. Presented by Capt. Parry.

k. Sicily. From Mr. Melly's collection.

\* l. Marseilles.

28. *CENTROTUS CURVIDENS*.

*Centrotus curvidens*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 515, 18.

Mexico.

29. *CENTROTUS ACANTHASPIS*.

*Centrotus acanthaspis*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 515, 19.

Port Jackson.

30. *CENTROTUS TRISPINIFER*.

*Centrotus trispinifer*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 515, 20, pl. 7, f. 35.

*a*. New Holland. Presented by the Haslar Hospital.

*b—d*. Van Dieman's Land. From Dr. Hooker's collection.

31. *CENTROTUS VIRESCENS*.

*Centrotus virescens*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 515, 21.

*a—c*. New Holland. Presented by the Haslar Hospital.

*d*. New Holland. Presented by the Entomological Club.

*e*. New Holland.

*f*. Van Dieman's Land. From Dr. Hooker's collection.

*g*. New South Wales.

32. *CENTROTUS HAVANENSIS*.

*Centrotus Havanensis*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 516, 22.

Cuba.

33. *CENTROTUS URSUS*.

*Centrotus ursus*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 516, 23, pl. 3, f. 6.

Sierra Leone.

34. *CENTROTUS FLEXUOSUS*.

*Membracis flexuosa*, *Fabr. Ent. Syst.* iv. 12, 6.

*Centrotus flexuosus*, *Fabr. Syst. Rhyn.* 18, 10. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 516, 24.

*C. anchorago*, *Guér. Icon. Règ. An.* pl. 59, f. 4.

a—c. Tenasserim. Presented by — Packman, Esq.

d. East Indies. From Archdeacon Clerk's collection.

### 35. CENTROTUS ASSAMENSIS.

*Centrotus assamensis*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 517, 25.

Assam.

### 36. CENTROTUS JAVANENSIS.

*Centrotus Javanensis*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 517, 26.

Java.

### 37. CENTROTUS NEUTER.

*Centrotus neuter*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 517, 27.

Java.

### 38. CENTROTUS OBESUS.

*Centrotus obesus*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 518, 28.

Java.

### 39. CENTROTUS POEYI.

*Centrotus Poeyi*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 518, 29.

Cuba.

### 40. CENTROTUS MALLEATOR, Mas.

*Nigro-cyanus* ; *pectus et abdomen nigra* ; *abdomen supra cinereum*,  
*apice piceum* ; *pedes nigri* ; *alæ anticae limpidæ, basi piceæ*,  
*apice luridæ, ad costæ apicem fusco vittatæ* ; *alæ posticæ sub-*  
*limpidæ, marginibus posticis subfusce.*

Nearly allied to *C. flexuosus*, clothed with pale hairs: head and fore-chest dark blue: head transverse, punctured, much narrower than the fore-chest; face conical, prominent, a little shorter than the hinder

part of the head: fore-chest convex, not ridged, roughly punctured, clothed with pale hairs along the fore border, deep in front, rising vertically from the head; shoulders not prominent; horns above them broad, thick, prismatic, diverging, hardly inclined backward, about half the length of the space between them; sides conical: upper side broader than either of the lower sides; hind horn slightly ascending, forming a very acute angle with the abdomen, thick at the base, slender triangular tapering and almost smooth from thence to the tip which is very acute and extends far beyond the tip of the abdomen: breast and abdomen black: abdomen gray above, punctured with black; tip pitchy, shining: legs black: fore-wings lanceolate, pitchy at the base, colourless from thence to the middle with the exception of two or three narrow lurid stripes, lurid from the middle to the tips with the exception of a brown stripe along the hind border; veins pitchy along part of the fore border, ferruginous along the hind border and towards the tips: hind-wings almost colourless, pale brown along the hind borders; veins pitchy. Length of the body 4 lines; of the wings 9 lines.

a. Java. From Mr. Argent's collection.

#### 41. CENTROTUS MALLEUS, Mas.

*Nigro-cyaneus; pectus et abdomen nigra; abdomen supra piceum, apice nigrum; pedes nigri; tarsi ferruginei; alæ limpidæ, basi et margine postico piceæ, apice luridæ.*

Nearly allied to *C. malleator*, thinly clothed with pale hairs: head and fore-chest dark blue: head transverse, finely punctured, much narrower than the fore-chest; face conical, prominent, a little shorter than the hinder part of the head; epistoma triangular: mouth ferruginous: fore-chest convex, not ridged, roughly punctured, finely punctured along the fore border where it is clothed with pale hairs, deep in front, rising vertically from the head; shoulders not prominent; horns above them broad, thick, prismatic, diverging, hardly inclined backward, shorter than half the length of the space between them; sides conical; upper side broader than either of the lower sides; hind horn slightly ascending, forming a very acute angle with the abdomen, thick at the base, slender trilateral tapering and almost smooth from thence to the tip which is very acute and extends far beyond the tip of the abdomen; sides slightly concave: breast and abdomen black; abdomen gray above, punctured with black, tip black, shining: legs black; feet ferruginous: fore-wings lanceolate, colourless, pitchy at the base and along two-thirds of the fore border, lurid from thence to the tips; a narrow pitchy stripe along the



hind border; veins ferruginous, pitchy along the fore borders: hind-wings colourless. Length of the body 3 lines; of the wings 8 lines.

a. Ceylon. Presented by Dr. Hooker.

#### 42. CENTROTUS MALLEOLUS, Mas.

*Nigro-cyaneus; pectus et abdomen nigra; pedes nigri; tarsi ferruginei; alæ anticae luridae basi piceae, margine postico sublimpidæ.*

Nearly allied to *C. malleus*, thinly clothed with pale hairs: head and fore-chest dark blue: head transverse, finely punctured, almost triangular, much narrower than the fore-chest; face prominent, a little shorter than the hind part of the head: mouth ferruginous: fore-chest convex, hardly ridged, roughly punctured, clothed with pale hairs along the fore border, deep in front, rising vertically from the head; shoulders obtusely angular, not prominent; horns above them broad, thick, prismatic, diverging, hardly inclined backward, shorter than half the length of the space between them; sides conical; upper side broader than either of the lower sides which are slightly concave; hind horn almost horizontal, slightly curved downwards towards the tip, forming a very acute angle with the abdomen and about twice its length, thick at the base, slender trilateral tapering and almost smooth from thence to the tip which is very acute and extends very far beyond the tip of the abdomen; sides slightly concave: breast, abdomen and legs black; knees and feet ferruginous: fore-wings lurid, pitchy, at the base of the fore border, almost colourless along part of the hind border; veins pitchy, lurid towards the tips: hind-wings pale. Length of the body  $3\frac{1}{2}$  lines; of the wings  $7\frac{1}{2}$  lines.

a. Java. From Mr. Argent's collection.

#### 43. CENTROTUS ERIGENS, Fem.

*Niger; abdomen cinereo suffusum; alæ sublimpidæ; alæ anticae nigro-fusco marginatæ.*

Black: head and fore-chest roughly punctured: head transverse, much narrower than the fore-chest: fore-chest convex, slightly ridged, very deep in front, rising vertically from the head; shoulders obtusely angular, hardly prominent; horns above them broad, thick, prismatic, diverging, very slightly inclined backwards and downwards, as long as the space between them; sides conical, slightly and irregularly ridged, of almost equal breadth; hind horn very deep at

the base, slender tapering trilateral ridged and slightly curved from thence to the tip which is acute and extends beyond the tip of the abdomen : abdomen tinged with gray : fore-wings blackish-brown along the borders, almost colourless in the disks, punctured at the base along three-fourths of the fore border : hind-wings almost colourless. Length of the body  $4\frac{1}{2}$  lines ; of the wings 9 lines.

a. Philippine Islands. From Mr. Cuming's collection.

#### 44. CENTROTUS COSTALIS, Fem.

*Piceus, flavo varius ; prothorax flavo bimaculatus, apice niger ; caput subtile, pectus et abdomen plerumque flava ; pedes fulvi ; tarsi basi et apice picei ; alæ anticae subfulvæ, basi et ad costam piceæ ; alæ posticæ sublimpidæ.*

Head and fore-chest pitchy mingled with yellow, shining : head transverse, slightly impressed, thinly punctured, a little narrower than the fore-chest between the shoulders ; face angular and prominent in front ; its hinder part semicircular, about half the length of the hinder part of the head : fore-chest rather shallow, rising vertically above the head, slightly ridged, roughly punctured ; shoulders angular, not prominent ; horns above them conical, prismatic, diverging, very slightly inclined upwards in accordance with the concavity between them ; their length about equal to the diameter at the base ; upper side and lower side broader than the hinder side ; fore-chest behind them keeled, extending much beyond the tip of the abdomen, impressed and with a large yellow spot on each side, tapering and much attenuated towards the tip which is black and acute : head beneath, breast and abdomen mostly yellow : legs tawny ; feet pitchy at the base and towards the tips : fore-wings slightly tinged with tawny, punctured and pitchy at the base, pitchy along the fore border ; veins black ; one discoidal areolet : hind-wings almost colourless. Length of the body 4 lines ; of the wings 10 lines.

a. Columbia. From Mr. Turner's collection.

#### 45. CENTROTUS MEGACEROS, Fem.

*Niger ; pedes sat longi ; alæ anticae luridæ, basi nigrae, costæ basi flavo maculatæ.*

Black, shining : head transverse, impressed, slightly punctured, a little narrower than the fore-chest between the shoulders, slightly retuse in front where it is deeply notched on each side : fore-chest rugulose, rather shallow, slightly inclined backward above the head ; shoulders angular, hardly prominent ; horns above them very long,

prismatic, diverging obliquely upward; tips hooked or inclined at a right angle backward; inner sides and outer sides broader than the hinder sides; outer sides slightly concave; length of the horns equal to twice the breadth of the chest between them; hind appendage keeled, extending to the tip of the abdomen, tapering and very slender towards the tip which is very acute: breast covered with buff down: legs rather long: fore-wings lurid, black and punctured at the base, with a yellow spot on the fore border near the base; veins black, pitchy towards the tips; one discoidal areolet: hind-wings paler. Length of the body  $3\frac{1}{2}$  lines; of the wings 9 lines.

#### 46. CENTROTUS RUFIVENTRIS, Fem.

*Ferrugineus; caput nigro bimaculatum; cornua lateralia apice nigra; cornu posticum bicristatum; abdomen rufum; pedes nigro vittati; alæ anticæ subfulvæ.*

Ferruginous, thinly clothed with shining yellow hairs: head transverse, minutely punctured, narrower than the fore-chest, surrounded by a rim, with a black spot on each side between the eyelets and the eyes; face subfusiform, prominent in front, as long as the head behind it: fore-chest roughly punctured, low and inclined backward in front, distinctly ridged; shoulders rounded, not prominent: horns above stout, conical, prismatic, diverging, slightly ascending, black towards the tips which are mutilated in the specimen described; hind appendage slender, extending to the tip of the abdomen, much attenuated towards the tip which is very acute, armed with two erect, high, compressed, conical, acute humps, one at the base, the other in the middle: abdomen bright red, punctured, blackish towards the base beneath: legs ferruginous; thighs striped with black: fore-wings pale tawny, tawny and punctured towards the base; veins tawny; two discoidal areolets: hind-wings colourless. Length of the body 3 lines; of the wings 7 lines.

a. Moreton Bay. From Capt. Parry's collection.

#### 47. CENTROTUS IGNIPES, Fem.

*Nigro-cyaneus; cornua humeralia purpureo-cyanea; cornu posticum flavo bivittatum; pectus et abdomen rufa; pedes lætè rufi; alæ nigrae.*

Dark blue, narrow: head transverse, impressed, almost smooth, a little narrower than the fore-chest between the eyes; fore border slightly retuse; face conical, very prominent, a little shorter than

the length of the head behind it : fore-chest roughly punctured, shallow, inclined backward above the head ; shoulders angular, not prominent ; horns above them very long, prismatic, bright blue tinged with purple, diverging obliquely upward ; tips truncate, widened and forming acute angles backward ; inner sides and outer sides much wider than the hinder sides which are oblique ; length of the horns equal to thrice the breadth of the chest between them ; hind appendage keeled, very slightly curved, extending a little beyond the tip of the abdomen, tapering from the base to the tip which is very acute, bright pale yellow along the lower border on each side : breast and abdomen red, the latter pitchy about the ovipositor : legs very brilliant red : wings black ; fore-wings punctured at the base and along part of the fore border ; veins bluish-black ; two discoidal areolets. Length of the body  $3\frac{1}{2}$  lines ; of the wings 8 lines.

*a, b.* Jamaica. From Mr. Gosse's collection.

#### 48. CENTROTUS FLAVIVITTA, Mas.

*Niger ; prothoracis cornu posticum flavo bivittatum ; pedes ferrugini ; femora nigra ; tarsi posteriores fulvi ; alæ anticæ limpide, basi nigra, dimidio apicali flavo-fusca.*

Deep black, shining : head transverse, very minutely and thinly punctured, a little narrower than the fore-chest between the shoulders ; fore border slightly retuse ; face conical, rather prominent, more than half the length of the hinder part of the head : fore-chest roughly punctured, shallow, inclined backward above the head ; shoulders angular, slightly prominent ; horns above them long, prismatic, ascending, diverging, curved backward, tapering from the base to the tips which are acute ; their length nearly equal to twice the breadth of the chest between them ; inner sides and outer sides broader than the hinder sides ; hind appendage almost flat, slightly keeled, not extending to the tip of the abdomen, tapering from the base to the tip which is very slender, with a bright pale yellow stripe along each side near the base : a stripe of pale yellow down on each side of the breast, and sometimes a bright yellow stripe on each side beneath the abdomen : legs ferruginous ; thighs black ; hinder feet tawny with black tips ; fore-wings yellowish-brown, colourless towards the base where they are black and punctured ; veins tawny, black towards the base, pale yellow in the colourless part ; two discoidal areolets : hind-wings colourless ; veins black. Length of the body 2 lines ; of the wings .5 lines.

*a, b.* Jamaica. From Mr. Gosse's collection.

## 49. CENTROTUS AURIFASCIA, Mas et Fem.

*Ater*; *prothorax anticè flavo fasciatus, posticè flavo bivittatus*; *fem. abdomen basi ferrugineum, subtus flavo bivittatum*; *pedes ferruginei*; *femora picea*; *tibiæ intermediæ flavæ*; *tibiæ posticæ apice flavæ*; *alæ anticæ fuscæ, apicibus marginibusque posticis pallidiores, costæ basi limbo maculatæ*.

Deep black, shining: head transverse, smooth, a little narrower than the fore-chest between the shoulders, slightly impressed at the base of the face, hardly retuse along the fore border; face heart-shaped, prominent, nearly as long as the hinder part of the head: fore-chest convex, roughly punctured, rather shallow, slightly inclined backward and with a bright yellow arched band above the head; shoulders angular, hardly prominent; horns above them rather long, prismatic, ascending, diverging, very slightly curved backward, tapering from the base to the tips which are acute; their length rather exceeding the breadth of the chest between them; hind appendage rather flat, slightly keeled, not nearly extending to the tip of the abdomen, tapering from the base to the tip which is very slender, with a bright yellow stripe extending from the middle of each side to the base of the shoulder-horn: a stripe of pale yellow down on each side of the breast, and a bright yellow stripe on each side beneath the abdomen of the female which is ferruginous towards the base: legs ferruginous; thighs pitchy; middle-shanks yellow; hind-shanks yellow towards their tips: fore-wings dark brown, much paler towards the tips and along part of the hind border, with a colourless spot on the fore border near the base; veins pitchy, pale yellow on the colourless part: hind-wings paler. Length of the body  $2\frac{1}{2}$ —3 lines; of the wings 5—6 lines.

*a—d.* Jamaica. From Mr. Gosse's collection.

## 50. CENTROTUS PLATYGERUS, Fem.

*Ater*; *cornua apice ferruginea*; *abdomen subtus flavum, apice piceum*; *pedes picei*; *genua ferruginea*; *alæ anticæ subfuscæ, basi nigræ, costæ basi flavo maculatæ*; *alæ posticæ sublimpidæ*.

Deep black, shining: head transverse, finely and thinly punctured, a little narrower than the fore-chest between the shoulders, indistinctly ridged, very slightly retuse in front; face heart-shaped, prominent, ridged, a little shorter than the hind part of the head; fore-chest convex, moderately deep, indistinctly ridged, roughly

punctured, slightly inclined backward above the head; shoulders angular, hardly prominent; horns above them broad, prismatic, diverging, slightly ascending, hardly curved backward; their tips oblique, acute and ferruginous; hind side about half the breadth of each of the other sides; length of the horns equal to the breadth of the chest between them; hind appendage rather flat, slightly keeled, not extending to the tip of the abdomen, tapering from the base to the tip towards which it is ferruginous and very slender: breast clothed with pale yellow down: abdomen yellow beneath, pitchy towards the tip: legs pitchy; knees ferruginous: fore-wings slightly tinged with brown, black and punctured at the base near which there is a yellow spot on the fore border: veins pitchy, pale yellow in the yellow part: hind-wings almost colourless. Length of the body 3 lines; of the wings  $6\frac{1}{2}$  lines.

a. Jamaica. From Mr. Gosse's collection.

#### 51. CENTROTUS CRIBRATUS, Fem.

*Testaceus; alæ anticae ferrugineae, apice cinereae; alæ posticae sub-cinereae.*

Testaceous, thinly clothed with whitish hairs: head transverse, flat, almost triangular, not much broader than long, a little narrower than the fore-chest between the shoulders; face large, triangular, as long as the hind part of the head: fore-chest convex, shallow, roughly punctured, slightly ridged, much inclined backward above the head; shoulders slightly angular, not prominent; horns above long, broad, compressed, prismatic, very largely punctured, diverging obliquely, very slightly curved, convex in front and slightly widened towards their tips which are acute and inclined backward; hind side decreasing from the base to the tip, narrower at the base than either of the other sides which widen towards the tip; length of the horns about twice the breadth of the chest between them; hind appendage extending to the tip of the abdomen, slightly keeled, very slightly undulating, tapering, very slender towards the tip which is acute: fore-wings ferruginous, narrow, conical towards the tips which are grayish; veins ferruginous: hind-wings pale gray. Length of the body  $2\frac{1}{4}$  lines; of the wings  $6\frac{1}{2}$  lines.

a. Jamaica. From Mr. Gosse's collection.

## 52. CENTROTUS JUCUNDUS, Mas.

*Niger, facie ferruginea; prothorax anticè ferrugineus; cornua humeralia nigro-cyanea; cornu posticum ferrugineum, apice nigro-cyaneum; abdomen subtus fuscum, flavo bivittatum; pedes fulvi; tibiæ apice piceæ; alæ anticæ subluridæ, costæ basi limbo maculatæ.*

Black: head transverse, almost triangular, impressed, thinly clothed with shining tawny hairs, very thickly punctured, narrower than the fore-chest between the shoulders; fore border hardly retuse; face ferruginous, conical, prominent, shorter than the hind part of the head: eyes very prominent: feelers tawny: fore-chest convex, rather shallow, roughly punctured, slightly ridged, ferruginous and thinly clothed with tawny hairs in front; shoulders obtusely angular, not prominent; horns above almost straight, bluish-black, very roughly punctured, ascending, diverging, acute, prismatic, very slightly inclined backward; their length equalling the breadth of the fore-chest between them; sides almost equal; hind appendage extending to the tip of the abdomen, tapering, almost straight, slightly keeled, ferruginous, bluish-black and very slender towards the tip which is very acute: sides of the breast thickly covered with pale yellow down: abdomen pale brown beneath, bright yellow along each side: legs tawny; tips of the shanks and of the feet pitchy: fore-wings slightly lurid, punctured at the base, with a colourless spot on the fore border near the base; veins black, pitchy towards the tips, pale yellow in the colourless part: hind-wings paler. Length of the body 2 lines; of the wings 5 lines.

a. Jamaica. From Mr. Gosse's collection.

## 53. CENTROTUS MONTIFER, Fem.

*Piceus; caput nigrum; tarsi ferruginei; alæ luridæ.*

Body pitchy, short, broad, clothed with golden hairs: head black, transverse, thickly punctured, slightly impressed, truncate and slightly retuse in front, much narrower than the fore-chest between the shoulders; face truncate in front, its hind part obconical, less than half the length of the head: fore-chest ridged, roughly punctured, rising vertically above the head, much impressed in front, angular on each side before the shoulders which are also angular but not prominent; horns above very thick, prismatic, ascending, diverging, slightly curved backwards, forked towards their tips; hind fork short, almost vertical; length of the horns about twice the

breadth of the chest between them; hind appendage extending to half the length of the abdomen, forming a compressed almost conical hump which inclines slightly forward, its disk on each side is concave: legs stout; feet ferruginous; hind-shanks beset with a row of short black spines: wings lurid; fore-wings lanceolate, punctured at base; veins ferruginous. Length of the body 3 lines; of the wings 6 lines.

a. Hong Kong. Presented by J. C. Bowring, Esq.

#### 54. CENTROTUS DECISUS, Fem.

*Piceus; pectus albo pubescens; abdomen rufum, apice piceum; tibiæ sat latæ; alæ anticæ subfulvæ, basi piceæ, costæ basi ferruginæ; alæ posticæ limpide.*

Pitchy: head transverse, irregularly triangular, thickly punctured, slightly impressed, notched and very slightly retuse on each side in front, a little narrower than the fore-chest between the shoulders; face broad, slightly truncated in front; hind part semicircular, occupying a little less than half the length of the head; epistoma covered with whitish down: fore-chest high in front, roughly punctured, very slightly ridged, rising vertically above the head; shoulders angular, not prominent; horns above them very thick, prismatic, ascending, slightly diverging, conical, their tips much rounded: hind side much narrower than either of the other sides; length of the horns much exceeding the breadth of the chest between them; hind appendage extending far beyond the tip of the abdomen, slightly curved, tapering from the base to the tip which is acute; sides of the scutellum clothed with tawny down: breast clothed with whitish down: abdomen dark red, pitchy at the tip: shanks rather broad: fore-wings lanceolate, slightly tinged with tawny, pitchy and punctured at the base, ferruginous at the base of the fore border; veins ferruginous; three discoidal areoles: hind-wings colourless; veins pale yellow. Length of the body 4 lines; of the wings 8 lines.

a. New Holland. From Mr. Argent's collection.

#### 55. CENTROTUS INVARIUS, Mas.

*Ferrugineus; pectus et abdomen picea; alæ anticæ subfulvæ, basi fulvæ; alæ posticæ limpide.*

Ferruginous, clothed with tawny hairs: head transverse, very little narrower than the fore-chest between the shoulders: fore-chest rather low, finely punctured, very slightly ridged, rising almost ver-



tically from the head; shoulders rounded, not prominent; horns above quadrilateral, lanceolate, ascending, much diverging, hardly inclined forward, very slightly curved outward; their length equal to twice the breadth of the chest between them; hind appendage long, almost straight, tapering, very slender: breast and abdomen pitchy: legs ferruginous: fore-wings lanceolate, slightly tinged with tawny, tawny and punctured at the base; veins ferruginous: hind-wings colourless. Length of the body  $2\frac{1}{2}$  lines; of the wings 5 lines.

a. China?

#### 56. CENTROTUS CONTRACTUS, Fem.

*Piceus; pectus et scutellum flavo pubescentia; alæ limpidæ; alæ anticae basi piceæ.*

Pitchy, clothed with pale tawny down: head transverse, rather roughly punctured, a little narrower than the fore-chest between the shoulders, notched and slightly retuse on each side of the face, which is spindle-shaped prominent and a little longer than the hind part of the head: fore-chest rather high, very roughly punctured, hardly ridged, rising vertically from the head; shoulders obtusely angular, not prominent; horns above very thick, quadrilateral, ascending, slightly diverging, twisted, dilated towards their tips which are truncated and have very acute outward angles; length of the horns equal to twice the breadth of the chest between them; hind appendage keeled, extending far beyond the tip of the abdomen, slightly curved, tapering from the base to the tip, rather deep towards the base, slightly undulating along the ridge: breast and sides of the scutellum clothed with yellow down: wings colourless; fore-wings pitchy and punctured towards the base; veins ferruginous, very thick; two discoidal areolet. Length of the body 3 lines; of the wings 7 lines.

a. New Holland. Presented by the Haslar Hospital.

#### 57. CENTROTUS FALCATUS, Mas.

*Piceus; pectus flavo hirtum; abdomen nigrum, albo hirtum; pedes ferruginei; alæ anticae luridæ, basi piceæ; alæ posticæ sublimpidæ.*

Pitchy, clothed with dingy white hairs: head transverse, flat, finely punctured, angular in front, a little narrower than the fore-chest; face narrow, a little less than half the length of the head: fore-chest rather low, very slightly ridged, roughly punctured, rising

almost vertically from the head; shoulders rounded; not prominent; horns above very thick, almost erect, nearly contiguous at the base, slightly diverging, prismatic, twisted, with three ridges on the inner side towards the tips which are truncated and slightly hooked; hind appendage very slightly curved, extending much beyond the tip of the abdomen, keeled, tapering from the base to the tip which is acute: breast clothed with yellow hairs: abdomen black, clothed beneath with white hairs: legs dark ferruginous: fore-wings lurid, narrow, lanceolate, pitchy and punctured at the base; veins ferruginous: hind-wings almost colourless. Length of the body  $3\frac{1}{2}$  lines; of the wings 7 lines.

a. Van Dieman's Land. Presented by the Rev. Augustus Beaufort.

#### 58. CENTROTUS TENEBROSUS, Fem.

*Niger; prothorax ferrugineo carinatus; pedes ferruginei; femora nigra; tibiæ subdilatatae; alæ anticæ subfulvæ, basi piceæ; alæ posticæ limpidae.*

Black, clothed with tawny hairs: head transverse, flat, impressed, finely punctured, truncated in front, a little broader than long, not much narrower than the fore-chest between the shoulders; face obconical, not half the length of the head: fore-chest rather high, with a distinct ferruginous ridge, very slightly inclined backward above the head; shoulders rounded, not prominent; horns above conical, short, prismatic, very thick, diverging, slightly ascending; inner side broader than either of the other sides; length of the horns nearly equal to twice the breadth of the chest between them; hind appendage stout, extending much beyond the tip of the abdomen, hardly inclined upward, very slightly tapering from the base to the tip which is conical: legs ferruginous; thighs black; shanks slightly dilated: fore-wings lanceolate, slightly tinged with tawny, pitchy and punctured at the base; veins ferruginous; four discoidal areolets: hind-wings colourless. Length of the body 3 lines; of the wings  $6\frac{1}{2}$  lines.

a. Sierra Leone. Presented by the Rev. D. F. Morgan.

#### 59. CENTROTUS CONVERGENS, Mas.

*Niger; pedes ferruginei; femora nigra; alæ limpidae; alæ anticæ basi nigrae et punctatae.*

Black, clothed with tawny down: head and fore-chest thickly and rather coarsely punctured; head short, transversely subfusiform

very little narrower than the chest, notched and slightly retuse on each side of the face which is prominent and truncate in front, and truncate-obconical behind: fore-chest high in front, rising vertically from the head, indistinctly ridged; shoulders angular, not prominent; horns above compressed, elongate-conical, inclined forward, almost parallel but slightly curved outward, in length about twice the breadth of the chest between them: legs ferruginous; thighs black: wings colourless; fore-wings black and punctured at the base; veins pitchy, ferruginous towards the base; two discoidal areolets. Length of the body 2 lines; of the wings 4 lines.

a. Philippine Islands. From Mr. Cuning's collection.

#### 60. CENTROTUS ATRATUS, Mas.

*Ater*; *abdomen cinereum, apice ferrugineum*; *tarsi ferruginei, apice supra piceæ*; *alæ anticæ subluride, basi nigræ*.

Allied to *C. altifrons*, but the ridge in front of the fore-chest is more conspicuous, and the horns above the shoulders are broader. Black, clothed with tawny hairs: head transverse, short, closely punctured, a little narrower than the fore-chest between the shoulders, slightly retuse in front, face prominent, notched on each side, conical in front, truncate behind: eyes very prominent: fore-chest deep in front, very slightly convex, roughly punctured, distinctly ridged, rising vertically from the head; shoulders angular, not prominent; horns above conical, prismatic, acute, almost horizontal and directly diverging, slightly curved backward, hardly inclined upward; their length not exceeding the breadth of the chest between them; hind side shorter than either of the other sides: abdomen gray, with black punctures, ferruginous at the tip: feet ferruginous, pitchy above towards the tips: wings slightly lurid; fore-wings black and punctured at the base; veins black; two discoidal areolets. Length of the body 3 lines; of the wings 7 lines.

a. Sierra Leone. Presented by the Rev. D. F. Morgan.

#### 61. CENTROTUS TRANSIENS, Fem.

*Piceus*; *pedes ferruginei*; *femora nigra*; *tibiæ subdilatatæ*; *alæ limpidæ*; *alæ anticæ basi piceæ*.

Pitchy, clothed with tawny hairs: head transverse, closely punctured, a little narrower than the fore-chest; its breadth about twice its length; front flat, notched on each side of the face which is obconical and about half the length of the head: fore-chest

roughly punctured, moderately high in front, rising almost vertically from the head, with a slight ridge; shoulders rounded, not prominent; horns above conical, broad, prismatic, acute, slightly diverging and curved outward, a little inclined forward, in length about twice the breadth of the chest between them; edge ferruginous; hind side much narrower than either of the other sides which are slightly ridged; hind appendage keeled, slender, slightly curved downward, tapering from the base to the tip which is very acute and extends far beyond the tip of the abdomen: legs ferruginous; thighs black; shanks very slightly widened: wings colourless; fore-wings rather long and narrow, pitchy and punctured at the base; veins ferruginous, pitchy at the base; two discoidal areolets. Length of the body 3 lines; of the wings 7 lines.

#### 62. CENTROTUS PALLIDUS, Fem.

*Ferrugineus; alæ limpidæ; alæ anticæ basi piceæ.*

Ferruginous, thickly clothed with pale tawny hairs: head very short, narrower than the fore-chest, transversely subfusiform, with the exception of the face, which is conical, narrow, very prominent, and longer than the head behind it: eyes prominent: fore-chest low in front, inclined backward, with a distinct ridge; shoulders rounded, not prominent; horns above diverging, very slightly ascending, prismatic, acute, slightly curved backward, in length a little less than the breadth of the chest between them; hind side a little narrower than either of the other sides; hind appendage tapering, slender, hardly notched above the scutellum: breast thickly clothed with pale yellow down: shanks slender: wings colourless; fore-wings pitchy at the base; veins ferruginous; two discoidal areolets. Length of the body 3 lines; of the wings 7 lines.

#### 63. CENTROTUS BICOLOR, Fem.

*Niger, subtus flavo pubescens; cornua ferruginea; pedes ferruginei; alæ limpidæ; alæ anticæ basi ferrugineæ.*

Black, thickly clothed beneath with pale yellow down: head very short, thinly punctured, a little narrower than the fore-chest, transversely subfusiform with the exception of the face, which is conical, very prominent, and much exceeds the length of the head behind it: eyes very prominent: fore-chest roughly punctured,

moderately high in front, very slightly ridged, a little inclined backward; shoulders rounded, not prominent; horns above ferruginous, long, prismatic, acute, diverging, inclined forward, slightly curved downward, in length more than twice the breadth of the chest between them; hind side narrower than either of the other sides; legs ferruginous: wings colourless; fore-wings ferruginous and punctured at the base; veins ferruginous; two discoidal areolets. Length of the body  $2\frac{1}{2}$  lines; of the wings 6 lines.

#### 64. CENTROTUS VITTA, Fem.

*Piceus; caput ferrugineo marginatum; abdomen apice ferrugineum; pedes ferruginei, tibiæ vix dilatatae; alæ anticæ limpidae, bivittatae.*

Pitchy, clothed with short tawny hairs: head transverse, short, punctured, with a ferruginous border, a little narrower than the fore-chest; face narrow, subfusiform, a little longer than the head behind it: eyes very prominent: fore-chest roughly punctured, moderately deep in front, slightly ridged, rising vertically from the head; shoulders rounded, not prominent; horns above long, thick, prismatic, twisted, ridged, very slightly diverging, a little inclined forward, hardly tapering from the base to the tips, which are truncated, in length about four times the breadth of the chest between them; outer side tapering towards the tip; inner and hind sides widening towards the tips; keel of the hind appendage black: scutcheon and breast clothed with pale yellow down: abdomen ferruginous towards the tip: legs ferruginous; shanks hardly widened: wings colourless; fore-wings narrow, pitchy and punctured at the base, whence a ferruginous stripe proceeds along the disk to the tip; two short brown stripes along the hind border; veins ferruginous; two discoidal areolets. Length of the body  $2\frac{1}{2}$  lines; of the wings 5 lines.

#### 65. CENTROTUS BASALIS, Fem.

*Niger, brevis, latus; cornua lateralia breviora; cornu posticum abdomine multò brevius; pedes ferruginei; femora nigra; alæ anticæ subflavae, basi piceae.*

Black, short, clothed with very short tawny hairs: head and fore-chest broad, dull, very thickly punctured: head almost trans-

versely elliptical, narrower than the fore-chest, retuse on each side of the face; this is also retuse and truncated in front, obconical behind, and a little shorter than the head behind it: fore-chest high in front, indistinctly ridged, rising vertically from the head; shoulders rounded, not prominent; horns above short, conical, prismatic, acute, diverging, curved upward, very slightly inclined backward, in length less than half the breadth of the chest between them; hind side a little narrower than either of the other sides; hind appendage keeled, much shorter than the abdomen, tapering from the base to the tip, which is very acute: legs ferruginous; thighs black: fore-wings very slightly tinged with pale yellow, pitchy and punctured at the base; veins tawny: two discoidal areolets. Length of the body 2 lines; of the wings  $4\frac{1}{2}$  lines.

a—c. Hong Kong. Presented by J. C. Bowring, Esq.

#### 66. CENTROTUS CAPREOLUS, Fem.

*Niger, brevis, latus; cornua lateralia brevissima; cornu posticum abdomine multò brevius; tarsi picci; alæ anticæ luridæ, albido maculatæ, basi nigrae.*

Black, short, broad, shining, minutely punctured, clothed with tawny hairs: head very short, transversely subfusiform, narrower than the fore-chest, slightly striated between the eyelets, slightly retuse along the fore border; face short, broad, truncate in front: fore-chest high, indistinctly ridged, rising vertically from the head, having on each side in front an oblique furrow, adjoining which it is almost smooth; shoulders angular, prominent; horns above very short, conical, prismatic, acute, diverging, slightly inclined upward, very slightly curved backward, in length less than one-third of the breadth of the chest between them; hind side a little narrower than either of the other sides; hind appendage stout, very much shorter than the abdomen, tapering from the base to the tip, which is acute: feet pitchy; wings lurid; fore-wings black and punctured at the base, near which there is a whitish mark; veins pitchy, ferruginous in the pale part; two discoidal areolets. Length of the body  $2\frac{1}{2}$  lines; of the wings  $5\frac{1}{2}$  lines.

a. Philippine Islands. From Mr. Cuming's collection.

b. Philippine Islands. From Mr. Wood's collection.

67. *CENTROTUS FINITIMUS*, Fem.

*Niger, latus; cornua lateralia brevissima; cornu posticum abdominis dimidii longitudine; abdomen supra cinereum; tarsi picei; alæ antice luridæ, albo fasciatæ, basi nigre.*

Black, shining, punctured, broad, clothed with tawny hairs: head and fore-chest roughly punctured: head short, transversely subfusiform, narrower than the fore-chest, slightly retuse along the fore border; face short, broad, truncate in front, truncate-obconical behind, as long as the head behind it: fore-chest high, indistinctly ridged, rising vertically from the head; shoulders very obtusely angular, slightly prominent; horns above very short, conical, prismatic, directly diverging, very slightly inclined upward, in length hardly more than one-sixth of the breadth of the chest between them; hind side not more than half the breadth of either of the other sides; hind appendage stout, not more than half the length of the abdomen, tapering from the base to the tip, which is acute: back of the abdomen gray, dull, with black punctures: tarsi pitchy: wings lurid; fore-wings black and punctured at the base, adjoining which there is a white band; veins ferruginous, partly pitchy, yellow in the pale part; two discoidal areolets. Length of the body 3 lines; of the wings 7 lines.

a. Hong Kong. Presented by J. C. Bowring, Esq.

Group 2.—*Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 518, 30.

68. *CENTROTUS AUSTRALIS*.

*Centrotus australis, Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 518, 30.

New Holland.

69. *CENTROTUS SUBSPINOSUS*.

*Centrotus subspinosus, Spinola, MSS. Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 519, 31.

Mexico.

## 70. CENTROTUS MACULISUTUM.

*Centrotus maculiscutum*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 519, 32.

*Uroxiphus maculiscutum*, *Amyot et Serv. Hist. Nat. Hém.* 550, 1, pl. 12, f. 9.

## 71. CENTROTUS FASCIATUS.

*Membracis fasciata*, *Fabr. Syst. Suppl.* 515, 33.

*Centrotus fasciatus*, *Fabr. Syst. Rhyn.* 22, 30. *Coq. Ill. Ic.* 35, pl. 9, f. 5.

*Cicada gibbosa*, *Deg. Ins.* iii. pl. 32, f. 20, 22.

a—c. West Indies.

## 72. CENTROTUS FLAVIDUS.

*Centrotus flavidus*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 519, 34.

Cuba.

## 73. CENTROTUS GENISTÆ.

*Cicada Genistæ*, *Fabr. Sp. Ins.* ii. 318, 17. *Mant. Ins.* ii. 265, 27.

*Geoff. Ins.* i. 424, 19. *Gmel. Syst. Nat.* i. 3, 2093, 56.

*Membracis Genistæ*, *Fabr. Ent. Syst.* iv. 15, 31. *Oliv. Enc. Méth.* vii. 663, 9. *Petag. Inst. Ent.* ii. 617, pl. 9, f. 2.

*Centrotus Genistæ*, *Fabr. Syst. Rhyn.* 21, 26. *Panz. Faun. Germ.* 2, 20. *Tign. Ins.* 118. *Germ. Silb. Rev. Ent.* iii. 240, 21. *Mag. Ent.* iv. 23, 22. *Curt. Brit. Ent.* 313, 2. *Blanch. Hist. Nat. Ins.* iii. 181, 4. *Amyot et Serv. Hist. Nat. Hém.* 538. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 520, 35. *Costa, Fauna del Regno di Napoli, Ins. Emitt.* *Centrotus*, 2, 2.

*Smilia Genistæ*, *Germ. Silb. Rev. Ent.* iii. 240, 21.

*Oxyrachis Genistæ*, *Burm. Handb. Ent.* ii. 1, 133, 2.

*Gargara*, *Amyot, Ann. Soc. Ent. Fr. 2me Série*, v. 181, 412.

a—e. England.

f—k. France. .



## 74. CENTROTUS DILATATUS.

*Fuscus, latissimus*; *cornu posticum brevissimum*; *alæ anticae subcinereæ, basi ferrugineæ*; *venæ nodosæ*.

Brown, clothed with dingy tawny hairs: head wanting: fore-chest very broad, indistinctly ridged, low in front: shoulders flat, conical, very prominent; horns above compressed, angular, extremely short; hind appendage very short, triangular, keeled, impressed on each side near the base, not extending much beyond the base of the abdomen: fore-wings grayish, ferruginous at the base; veins ferruginous, nodose. Length of the body  $1\frac{1}{2}$  line; of the wings 3 lines.

a. Philippine Islands. From Mr. Cuming's collection.

## 75. CENTROTUS PYGMÆUS, Fem.

*Fuscus, latus*; *cornu posticum abdominis dimidio longius*; *abdomen nigrum, ferrugineo fasciatum*; *pedes nigri*; *tarsi fulvi*; *alæ anticae luridæ, basi nigræ*.

Brown, clothed with dingy tawny hairs: head transverse, narrower than the fore-chest, bordered by a rim; face broad, convex and slightly retuse in front, angular behind, shorter than the head behind it: fore-chest slightly ridged, low and slightly retreating in front; shoulders rounded, not prominent; no dorsal horns; hind appendage keeled, slightly undulating above, tapering from the base to the tip, extending beyond half the length of the abdomen: abdomen black; hind borders of the segments ferruginous; legs black; tarsi tawny; wings lurid; fore-wings black and punctured at the base; veins pitchy. Length of the body  $1\frac{1}{2}$  line; of the wings 2 lines.

a, b. Philippine Islands. From Mr. Cuming's collection.

## CENTROTUS ——— ? Larva.

a, b. British Guiana. Presented by Sir R. Schomburgk.

## CENTROTUS ——— ? Larva.

a. ——— ? Presented by the Entomological Club.

## CENTROTUS -

a. Brazil. From Mr. Shuckard's collection.

## Genus 39. HYPSAUCHENIA.

*Centrotus*, Kirby, *Westw.*

*Hypsauchenia*, Germ., *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 520,  
pl. 3, f. 21, pl. 7, f. 7, 18.

*Smilia*, Guér.

## 1. HYPSAUCHENIA HARDWICKII.

*Hypsauchenia Hardwickii*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*,  
iv. 520, 1, pl. 3, f. 20.

*Centrotus Hardwickii*, Kirby, *Mag. Nat. Hist.* 1829, 20, f. 56.

*Hypsauchenia balista*, Germ. *Silb. Rev. Ent.* iii. 231, 1.

*a—k.* Nepaul.

## 2. HYPSAUCHENIA WESTWOODI.

*Hypsauchenia Westwoodi*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*,  
iv. 521, 2, pl. 7, f. 6, 8.

*a—d.* Philippine Islands. From Mr. Wood's collection.

*e* ———?

## 3. HYPSAUCHENIA BIFASCIATA.

*Centrotus bifolius*, *Westw. Proc. Zool. Soc.* 1837, 130.

*Smilia bifoliata*, Guér. *Mag. Zool.*

## Genus 40. ANOMUS.

*Anomus*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 521, 35.

## 1. ANOMUS RETICULATUS.

*Anomus reticulatus*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 522,  
1, pl. 7, f. 31, 32.

Brazil.

## Genus 41. LYCODERES.

*Centrotus*, *Fabr.*, *Germ.*

*Lycodres*, *Germ.*, *Amyot et Serv. Hist. Nat. Hém.* 551, 449. *Fairm.*

*Bocydiūm*, *Lesson.*

## 1. LYCODERES MITRATUS.

*Lycoderes mitratus*, *Germ. Silb. Rev. Ent.* iii. 311. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 523, 1, pl. 3, f. 25.

*L. Spinolæ*, *Fairm. Guér. Rev. Zool.* 1846, 12.

VAR? *Mus.*

*Piceus*; *pectus ferrugineum*; *abdomen rufum*; *pedes fulvi*; *tibiæ dilatatæ*; *alæ limpidæ*; *alæ anticæ basi et apice rufo-fusæ.*

Head and fore-chest pitchy: head small, transverse, a little narrower than the fore-chest between the shoulders, minutely punctured, forming a triangular and slightly retuse lobe on each side in front; face conical, much shorter than the hinder part of the head: fore-chest very roughly punctured, slightly ridged; shoulders very obtusely angular, not prominent; above them the fore-chest is vertical and forms a short and very thick pedestal whose diameter on the length of the thorax is full twice that on its breadth; above it there is a very large transverse thinly reticulated semi-elliptical expansion; the fore-chest is keeled behind and forms a compressed very deep slightly recurved horn whose hind part is slender and extends a little beyond the tip of the abdomen: breast ferruginous: abdomen bright red: legs tawny; tibiæ (especially the fore tibiæ) widened: wings colourless; fore-wings rather broad towards their tips, punctured at the base and along a small part of the fore border, obliquely reddish-brown near one-third of the surface from the base; reddish-brown at their tips, when this hue, contrary to that at the base, extends inward from the fore border to the hind border, and thereby the colourless part is almost triangular; veins pitchy; no discoidal areolet. Length of the body 3 lines; of the wings 7 lines.

*a. Brazil.* From *M. Parzudaki's* collection.

## 2. LYCODERES GALERITUS.

*Lycoderes galeritus*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 523, 2. *Bocydiūm galeritum*, *Less. Ill. Zool.* pl. 56, f. A. B. C.

*Brazil.*

## 3. LYCODERES GLADIATOR.

*Lycoderes gladiator*, *Germ. Silb. Rev. Ent.* iii. 310. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 523, 3, pl. 3, f. 26.

Brazil.

## 4. LYCODERES FUSCUS.

*Lycoderes fuscus*, *Amyot et Serv. Hist. Nat. Hém.* 562, pl. 12, f. 10.  
*Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 524, 4, pl. 3, f. 24.  
 =? *L. mitratus*.

South America.

## 5. LYCODERES ANCORA.

*Lycoderes ancora*, *Germ. Silb. Rev. Ent.* iii. 259. *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 524, 5, pl. 3, f. 27.  
*Centrotus ancora*, *Germ. Mag. Ent.* iv. 32, 4, pl. 1, f. 3. *Burm. Handb. Ent.* ii. 1, 132, 2.

Brazil.

## 6. LYCODERES FURCA.

*Lycoderes furca*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 524, 6.  
 Bahia.

## 7. LYCODERES GAFFA.

*Lycoderes gaffa*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 524, 7,  
 pl. 3, f. 29.

Brazil.

## 8. LYCODERES BURMEISTERI.

*Lycoderes Burmeisteri*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 525, 8, pl. 3, f. 28.

Brazil.

## 9. LYCODERES UNICOLOR.

*Lycoderes unicolor*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 525, 9.

Brazil.

## 10. LYCODERES PETASUS.

*Lycodores petasus*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 525, 10.  
Brazil.

## 11. LYCODERES PILEOLUM.

*Lycoderes pileolum*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 526,  
11.  
Cayenne.

## 12. LYCODERES HIPPOCAMPUS.

*Centrotus hippocampus*, *Fabr. Syst. Rhyn.* 20, 22.  
South America.

## Genus 42. STEGASPIS.

*Cicada*, *Linn., Deg., Gmel.*

*Membracis*, *Fabr., Oliv.*

*Stegaspis*, *Germ. Amyot et Serv. Hist. Nat. Hém.* 533, 422.

*Lycoderes*, *Fairm.*

## 1. STEGASPIS FRONDITIA.

*Stegaspis fronditia*, *Burm. Handb. Ent.* ii. 1, 136, 1. *Amyot et Serv. Hist. Nat. Hém.* 533, 1.

*Cicada fronditia*, *Linn. Syst. Nat.* ii. 705, 3. *Gronov. Zooph.* 676. *Stoll, Cic.* i. pl. 6, f. 31, A. B. C. *Fabr. Sp. Ins.* ii. 316, 2. *Mant. Ins.* ii. 262, 3. *Gmel. Ed. Syst. Nat.* i. 3, 2093, 3.

*Membracis fronditia*, *Fabr. Ent. Syst.* iv. 9, 3, 8, 9? *Syst. Rhyn.* 7, 6. *Deg. Ins.* iii. pl. 32, f. 15, 16. *Oliv. Enc. Méth.* vii. 663, 7.

*Lycoderes fronditia*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 526, 12.

a. ———?

## 2. STEGASPIS ———.

——— *Stoll, Cic.* 69, pl. 17, f. 93.

Surinam.

## 3. STEGASPIS SQUAMIGERA.

*Cicada squamigera*, *Linn. Syst. Nat.* ii. 705, 4. *Gmel. Ed. Syst. Nat.* i. 3, 2093, 4. *Deg. Ins.* iii. pl. 32, f. 17, 18.

*Membracis squamigera*, *Fabr. Sp. Ins.* ii. 318, 16. *Mant. Ins.* ii. 265, 27. *Ent. Syst.* iv. 10, 8. *Syst. Rhyn.* 10, 21. *Oliv. Enc. Méth.* vii. 663, 8.

*Lycoderes squamiger*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 526, 13.

Cayenne.

## 4. STEGASPIS LÆVIPENNIS.

*Lycoderes lævipennis*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 527, 14.

Cayenne.

## 5. STEGASPIS FOLIUM.

*Membracis folium*, *Oliv. Enc. Méth.* vii. 668, 9. *Stoll, Cic.* 46, pl. 10, f. 48.

*Lycoderes folium*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 527, 15.  
Surinam.

## 6. STEGASPIS MELANOPETALUS.

*Membracis melanopetalus*, *Oliv. Enc. Méth.* vii. 668, 7. *Stoll, Cic.* 62, pl. 15, f. 80.

*Lycoderes melanopetalus*, *Fairm. Ann. Soc. Ent. Fr. 2me Série*, iv. 527, 16.

Surinam.

## 7. STEGASPIS? RHOMBEA.

*Cicada rhombea*, *Linn. Syst. Nat.* ii. 704, 4. *Act. Angl.* 1765, 55, pl. 6.

*Membracis rhombea*, *Fabr. Syst. Rhyn.* 7, 3.

South America. • 3

## Genus 43. LAMPROPTERA.

Tettigonia? *Fabr.*Centrotus, *Germ.*Lamproptera, *Germ., Burm. Fairm. Ann. Soc. Ent. Fr. 2me Série,*  
iv. 527.

## 1. LAMPROPTERA CAPREOLUS.

Centrotus capreolus, *Germ. Mag. Ent.* iv. 33, 5, pl. 1, f. 4.Lamproptera capreolus, *Germ. Silb. Rev. Ent.* iii. 261, 1. *Fairm.*  
*Ann. Soc. Ent. Fr. 2me Série,* iv. 528, 1, pl. 3, f. 11.Lamproptera capra, *Burm. Handb. Ent.* ii. 1, 131, 1.

Brazil.

## 2. LAMPROPTERA VACCA.

Centrotus vacca, *Germ. Mag. Ent.* iv. 34, 6.Lamproptera vacca, *Germ. Silb. Rev. Ent.* iii. 261, 1. *Burm. Handb.*  
*Ent.* ii. 1, 131, 2. *Fairm. Ann. Soc. Ent. Fr. 2me Série,* iv.  
528, 2, pl. 3, f. 10.

Brazil.

## 3. LAMPROPTERA? SCUTELLATA.

Tettigonia scutellata, *Fabr. Syst. Rhyn.* 44, 58.

South America.

## 4. LAMPROPTERA? MUSCARIA.

Tettigonia muscaria, *Fabr. Syst. Rhyn.* 44, 60.

South America.

## 5. LAMPROPTERA? PYGMÆA.

Tettigonia pygmæa, *Fabr. Syst. Rhyn.* 44, 57.

South America.







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